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Sir Mortimer Wheeler showing on television Roman pottery found at the fortress of Caerleon.

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SIR MORTIMER
WHEELER

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RONALD W. CLARK

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LEARNING TO DIG

ON the morning of 23rd June, 1890, a number of gentlemen and a group of labourers stood in the rich agricultural country that lies along the borders of Berkshire and Hampshire, between the Kennet Valley and the high downland running east from Inkpen Beacon. Around them stretched the coppices, wheatfields, and flourishing villages of the Duke of Wellington's estate of Stratfield Saye. Beneath their feet, buried under the accumulated soil of centuries, lay the pavements and ground-plans of the Roman town of Silchester, the *Callea Atrebatum* from which, almost two thousand years before, roads had led east to London, west to Exeter and to Bath, south to Winchester, and northwards to join Watling Street on its march towards the fringes of the Roman world.

Throughout that day, and throughout the weeks and months that followed, the labourers—usually under the watchful eye of one or more of the gentlemen—stripped the centuries away, eventually revealing, in even more detail than had been hoped, how their ancestors had lived in a Britain whose features could now be discovered only by a mixture of scholarship and detective-work.

They dug from six in the morning until six at night, for 2s. 6d. a day plus small bonuses for 'finds'—a halfpenny a coin, and threepence a letter for inscriptions. A Fellow of the Society of Antiquaries, which had organized the excavation, was present at the site each day, but the Director of operations only arrived when the men had been digging for three hours. The labourers, mainly from Silchester and the neighbouring villages, grew vegetable marrows on the spoil-heaps, and their wives, bringing mid-day dinners to the site, added an almost family atmosphere to the work.

This excavation in the last ten years of the nineteenth century, has been harshly criticized by later archaeologists, and it is true that the methods used have an almost alarming casualness when judged by present-day standards. When the excavation had first been proposed at a meeting of the Society of Antiquaries in London it had been suggested, almost as an innovation, that 'a proper overseer of the works' should be appointed. It was 'hoped that something would be found'. And the 'explorers', as they were called by *The Times*, concentrated most of their energies on the physical collection of Roman remains, paying little attention to the vital matter of how far down in the accumulated debris of centuries these 'finds' were actually discovered. It is difficult not to believe that in the opinion of those involved, a special blessing was given to the venture by the fact that the work was carried out on the ground of, and with the gracious permission of, a noble duke.

Yet for all its faults, the excavation of Silchester, which is an illustration of archaeological methods at the end of the last century, added mightily to what we knew about our own past. 'True it was dug like potatoes, without a shadow of the scientific nicety of the contemporary excavations in Cranborne Chase. . . . But it gave at once, and with a rough accuracy, the general impression of a Romano-British town such as fifty years of subsequent and often more careful work have failed to equal.'

That verdict, given sixty-four years later, comes from a man who was born in the summer during which the Silchester excavations were begun; and who was, perhaps more than any other, to transform the practice of archaeology in Britain, giving precision to its methods and a new humanism to its aims.

His name was Robert Eric Mortimer Wheeler, and when he was born in Glasgow in September, 1890, his father was a journalist on one of the local papers, a man of wide interests, and one familiar with the unexpected by-ways of knowledge. 'Cycling back the four miles from the newspaper office in the early hours of the morning, he would stop by the way to share the lives of policemen or tramps, or of a particularly reprehensible poacher who became also one of my boyhood confidants.' Thus wrote Wheeler, many years later, on the father whose example taught him three things above all others. That one must be interested in everything and everybody. That one must think clearly and—a more difficult task—learn to express

oneself clearly. And that 'nothing venture, nothing win' is an admirable motto, and its reverse a poor thing suitable only for the wretched creatures who are never willing to take a chance in life.

When the young Mortimer Wheeler was four years old his father was appointed assistant editor of a Bradford paper, and the family moved to Yorkshire; ten years later there came further promotion to the paper's London office, and the whole family travelled south to settle in the capital.

His fourteenth birthday therefore found Wheeler in London, his formal education completed by six years at the Bradford Grammar School, his informal education continuing well after the flying start given to it by the life of a liberal household. Largely self-taught from now onwards, he matriculated within two years, and won a scholarship to University College, London, twelve months later. Art was the main attraction, and it was only as he studied Greek art under Ernest Gardner that his mind began to be exercised with the problems of the past, that he began to think seriously about how the tangled story of dead and distant civilizations might be unravelled. Looking back in later years, he realized that this interest in the past had really started during the long walks with his father across the Yorkshire countryside. 'On one day it might be the discovery of a strange medieval kiln in a claypit at Baildon; or, further afield on another, the filling of our pockets with Roman potsherds where a stream cuts the flank of the Roman fort at Ilkley. Or again

the sight of the strange crosses in the Ilkley churchyard, or of the still stranger cup-and-ring marks on the hill-side above the town, or the picking up of an occasional flint knife or "scraper" on Rumbold's Moor.'

All these seeds were now watered by the knowledge which Wheeler acquired under Ernest Gardner. That they did not at once flower into a desire for professional archaeology was perhaps due to one fact—that in the world of the early 1900's the professional archaeologist, the man who actually made his living from the business of reconstructing the past, was still a rare animal.

Now the aims of archaeology have broadened out during the last half-century. Archaeology, according to one definition, 'is that branch of science which is concerned with past phases of human culture'—whether 'science' is the right word is, as we shall see later, a question on which different archaeologists have different views. There is, however, no dispute about the fact that archaeology deals with the past; it deals most frequently with the distant past, with 'prehistory', which is the story of the eras before the invention of writing. There is, of course, no reason why the methods and disciplines of archaeology should not be used to unravel the story of later periods—and they do in fact help to fill gaps in the story of Roman and Saxon Britain, to date medieval pottery, and even to reveal more about the Wars of the Roses and the Civil War of the 1640's. However, in the nature of things, the business of archaeology deals

largely with the vast period of the human past that stretches back before men could write. The extent of this period can well be realized by considering two facts—that writing was invented about five thousand years ago, and that the story of mankind goes back at least half a million years. Relating that story to a hundred yard race, one would therefore be within a yard of the finishing tape before man made the first hesitant mark from which alphabets finally developed. All this gives prehistoric archaeology a big enough task to do.

That task, as it has been developed during the last half-century, is something much more than the mere collection of implements and weapons and household goods. It is—largely due to the careful thought and persistent prodding of such men as Wheeler—one of discovering what sort of people the inhabitants of the past really were. One cannot discover their names. But one can discover what sort of houses they lived in, what they ate, whether they had domestic pets, how they buried their dead, and many other significant facts that will reveal a lot about their everyday lives. By skilful detective-work one may even be able to discover what they believed in, and what they were willing to die for, one of the most important things you can find out about anyone.

How is this task of archaeology carried out?

At the turn of the century it was tackled very largely by the collection of the pottery, the brooches and jewellery, the ancient wall-inscriptions. This was the second of three phases through which archaeology has

gone. The first was the collection of ancient works of art—the things that were beautiful but which did not necessarily have much relation to everyday life. Secondly came the collection of more commonplace objects, often a casual or even dangerously haphazard collection. ‘Local societies were pottering about, not quite understanding perhaps what they were really trying to do’, that great archaeologist, O. G. S. Crawford, has said of Britain during the last years of the nineteenth century. ‘Squires and parsons were “opening” barrows, and stripping Roman villas, doing irreparable harm to everything they touched,’ he wrote in *Archaeology in the Field*. ‘Collectors were snapping up the prehistoric and other antiquities that flowed in a steady stream from the gravel pits, dredgers and fields, often neglecting to label them.’

It was only as this second stage came to an end that most archaeologists began to realize that the exact place in which a ‘find’ was unearthed—and more particularly the stratum in which it lay—could often reveal as much information as the ‘find’ itself.

Wheeler began his professional life as this second stage was slowly developing into the third. He speeded up, and to a great extent controlled and directed, the development. And that he did so was largely due to the example of one man who was half a century before his time—a man who had been practising in the 1880’s the principles being slowly taken up in the 1920’s. His name was Pitt-Rivers, and he was one of the most remarkable characters—a correct word in this con-

text—that the Victorian age produced. His excavations laid the foundations of ‘stratification’ on which so much modern archaeological work is based; and his methods and his principles—as well as his adventurous approach to life—were those later developed and elaborated by Wheeler.

General, archaeologist, and anthropologist, Pitt-Rivers served in the Crimean War. A few years later, when the theory of evolution was beginning to shock or delight the world according to the world’s point of view, he was given the task of tracing the development of the Army rifle. He realized that the article then in use had evolved through the incorporation of scores of minor, apparently trifling, details, and this led him to study boats, dresses, musical instruments in the same way; in each case he found the traces of a similar process at work. Then in 1880, at the age of fifty-three, he inherited the vast estates which surrounded the family home at Rushmore in the heart of Cranborne Chase. And here, with his excavations of the Roman and prehistoric remains in which Wiltshire abounds, he laid out the framework of modern archaeology.

Pitt-Rivers, who became the first Inspector of Ancient Monuments under the Act of 1882 which aimed at preserving Britain’s relics of the past, was an innovator in two ways. In the first place he appreciated, better than most men of his time, that when an archaeologist dug up an ancient site he destroyed for ever most of the vital evidence from which the site’s story could be

read. The least that the excavator could do was to note in detail all the information available; and, as Pitt-Rivers' biographer points out, 'the large illustrated volumes, with exact drawings and tables, in which he records his excavations, would enable a modern contractor to refurnish the tombs and forts with their contents in place.'

Secondly, Pitt-Rivers emphasized the importance of stratification. The need for recording this is so obvious, its principles so simple, that the fact that other archaeologists ignored it merely stresses the haphazard way in which they worked. Put simply, stratification means that a spear dropped by a warrior three thousand years ago will almost certainly lie deeper under the present-day covering of earth than a Roman spear dropped by a legionary two thousand years ago. But—and herein lies the importance of stratification—if the two spears are moved from their resting-places without any exact record being taken of their positions, an invaluable piece of evidence will have been lost. It may be possible—as it would be in this particular case—to 'date' the 'finds' by the manner and materials in which they are made. But with many 'finds' this will not be possible. And in any case the evidence of the ground will have disappeared for ever.

Now stratification is used to date not only individual 'finds' but also the earthworks, either prehistoric, historic, or protohistoric—the term used to describe the segment of history only part of whose evidence comes from written sources—in which these are found.

Pitt-Rivers was himself responsible for one of the earliest, as well as one of the most dramatic, illustrations of how the principle works in this field. This took place during his excavations on Wansdyke, the great embankment with parallel ditch which stretches across southern England from the Bristol Channel to Inkpen Beacon. Archaeologists had for years debated the date of this impressive earthwork, some claiming that it was built in late Saxon times, others claiming that it was of Roman origin, and yet others maintaining that it was a creation of the tribes who inhabited Britain long before the coming of the Romans.

Near Shepherd's Shore, in western Wiltshire, the Wansdyke crosses the Roman road which led from London to Bath; at least, the lines of the dyke and the road intersect, for it is impossible for the casual observer to tell which crosses which. It was here that Pitt-Rivers set his teams of diggers to work, carefully ensuring that exact records were kept of the strata down through which the men cut. When he had finished, at least one problem of Wansdyke had been solved; for it was indisputably clear from the carefully-drawn sections that the Wansdyke had been built either in late Roman or in post-Roman times, since it ran either parallel to, or above, the Roman road.

In one respect Pitt-Rivers conformed to the pattern of his times. He was a wealthy man, one who could afford to hire labourers by the hundred, and whose magnificent privately published blue and gold volumes describing his excavations were illustrations of the

money-no-object attitude. To that extent he was not a professional archaeologist; and even in the decade before the First World War, the years during which Wheeler was studying at University College, there was still only a small handful of true professionals in the whole country. A few were employed at the British Museum; a few were working on the Royal Commissions on Historical Monuments; and there was a spattering in the Universities. But opportunities for earning a living at archaeology were few, the likely rewards pitifully small in terms of hard cash.

It is not surprising, therefore, that Wheeler failed to leap straight into archaeology. There were so few landing-places for a leap. His entry was a gradual one, his first job that of secretary to the Provost of University College, Sir George Foster.

Here he met, purely by chance, one of those self-willed geniuses whose characters have studded the story of archaeology. This was Flinders Petrie, Professor of Egyptology at University College. Dogmatic in opinion, spartan in habits, Petrie looked something like a Spanish grandee, and moved through the corridors of archaeology with the autocratic air of one. 'I was sent to see him about some trivial matter of College administration,' Wheeler told the Royal Archaeological Institute many years later. 'The great man's door opened. I was swept into a seat, and, before I could utter a word, Petrie was volubly instructing me to go to Pompeii before the end of the month and to prepare careful drawings of all the

Roman pottery preserved there and at Naples. A torrent of detailed instructions followed for several minutes, and it was not until a scarcely perceptible pause for breath occurred that I was able to persuade him that I was not the Smith or Jones whose visit he was expecting.'

A few months later Wheeler found himself promoted a small step up the University ladder. And he realized, with a slight shock one imagines, that although only twenty he was in danger of settling comfortably into a rut which would close in on him more and more severely as the years progressed. Leaping from such constricting ruts was to become a characteristic of Wheeler. Now, he made the first leap.

'My move in fact took three directions,' he has said. 'First, in my spare time I worked for an M.A. degree, which in the University of London is a serious undertaking. (I achieved the degree in 1912.) Secondly, I became engaged to Tessa. Thirdly, I applied for a new archaeological studentship which had been established jointly by the University and the Society of Antiquaries of London in memory of Augustus Wollaston Franks.'

Shortly afterwards Wheeler, who had submitted Romano-Rhenish pottery as a suitable subject for study, found that he had gained the studentship—and exchanged a £120-a-year post for one which brought in only £50 and which involved considerable travel.

There was first a visit to the Rhineland and then a spell of work at Wroxeter, where J. P. Bushe-Fox was

excavating the site of Viroconium and trying to establish whether the town had, as suspected, been suddenly overwhelmed by a wave of raiders from Wales.

Here at Wroxeter, Wheeler saw for the first time the machinery of excavation at work. 'In so far as I was taught the art of digging at all, Bushe-Fox was my first and only master,' he told fellow-archaeologists at the Society of Antiquaries many years later. 'The few weeks that I spent under him as a student at Wroxeter in 1913 taught me more than the elements of a technique; they taught me, I hope, something of the objective approach to first-hand evidence in the field, an approach combining the analytical, the sceptical, and the constructive in a fashion that cannot be learned from books.'

It is sometimes thought that archaeology is a matter of surprising finds, romantic revelations, exciting detective-work. This may on rare occasions be true, but the detective's work is one-half per cent excitement and 99½ per cent plodding and careful routine. In much the same way, it is from the lengthy accumulation of minute detail that many of the most exciting discoveries are plucked—'without the ideal of solid, continuous work, certain, accurate, and permanent, archaeology is as futile as any other pursuit', wrote Petrie.

At Wroxeter the same principle was drummed into Wheeler, who was fascinated by the bustle of a large and important 'dig'. 'I was, however, almost immediately consigned by Bushe-Fox to a hut and drawing-board

where, in the midst of all this brave and exciting new world, I was condemned by my mission to sit as a prisoner and draw pottery', he later told the Society of Antiquaries when he made his first Presidential Address more than forty years later. 'Bushe-Fox and I quickly came into conflict; more than once he found me absent from my desk without leave. Eventually, he laboriously wired my legs to those of the drawing-table, and I subsequently had some difficulty, I remember, in breaking the shackles. Observing me yet again amongst the trenches, he resorted to punishment of a more drastic kind; he had me lowered into a deep and very disgusting well and kept me there for many hours, indeed until I had cleared it out. I can only hope that I found the truth in the loathsome sludge at the bottom of it. At any rate, the incident began a sparring friendship which endured happily to the eve of his death.'

Archaeology had now claimed Wheeler, for better or for worse. We have already seen how one definition of the profession gives it as a 'science', and it may seem strange that a youth who had at one time wished to become an artist should cross to the other side in the Science versus the Humanities battle. The explanation is not only that the battle—forced on the mid-twentieth century by the overweening demands of some scientists—is largely an artificial one; it is also that archaeology, as Wheeler once said in a famous lecture, 'The Virtue of Intolerance', is a branch of the Humanities that is increasingly using scientific methods.

To understand how it was that this tall and strikingly handsome youth came to fit so well into the archaeological scene that was beginning to open out during the nineteenth century, it is only necessary to turn to the thirty-second of the seventy-odd books in which Flinders Petrie poured out the story of his excavations and of his life. This was *Methods and Aims in Archaeology*, a book quite as revealing of the author as it is of the methods in use at the turn of the century. Archaeology, he claims, 'gives a more truly "liberal education" than any other subject, as at present taught. A complete archaeological training would require a full knowledge of history and art, a fair use of language, and a working familiarity with many sciences. The one-sided growth of modern training, which produces a B.A. who knows nothing of natural science, or else a B.Sc. who knows nothing of human nature, is assuredly not the ideal for a reasonable man. Archaeology—the knowledge of how man has acquired his present position and powers—is one of the widest studies, best fitted to open the mind, and to produce that type of wide interests and toleration which is the highest result of education.'

Archaeology was, in fact, the preoccupation of the many-sided man, the man with broad vision, the man who could get away from the trees and take an overall look not only at the wood but at the surrounding countryside. Thus, the varied wisdom that Wheeler had drawn from his father came into its own—the craft of being able to converse with a Cabinet Minister

one day and with the local road-sweeper the next, the ability to understand the viewpoint of gamekeeper and poacher alike, the technique without which the working journalist cannot hope to keep his head decently above the tide.

And thus, Mortimer Wheeler set out on his chosen road with some ideal qualifications. In the autumn of 1913 he became a 'junior investigator', as the post was called, with the Royal Commission on Historical Monuments (England). Three months later he married Tessa Verney—the girl who was soon to become a distinguished archaeologist in her own right and who was to give him such help in the succeeding years. Eight months later, the First World War had begun and Wheeler—who recently remarked that he had spent a quarter of his working life as a soldier on active service—had been gazetted as a lieutenant in the Royal Artillery.

THE ROMANS IN WALES

THE war took five full years from Wheeler's life. It sent him through the morass of Passchendaele, into Italy, and then back on to the Western Front again for the final advance into Germany. It also brought him into contact with archaeological remains on two unexpected and curiously contrasted occasions.

That one occasion was a contact with archaeology at all was only underlined by a curious coincidence that happened after the end of the war.

O. G. S. Crawford, one of the pioneers of air photography as a tool for archaeologists, founder of the journal *Antiquity*, and subsequently a close friend of Wheeler's, was explaining how a knowledge of interpreting photographs from the archaeologist's point of view sometimes had unexpectedly practical uses. Pointing to an air photograph of the Western Front, he explained how he had been watching a sergeant make a map from it years before. On the photo was a mound, a medieval castle-site known as the Butte de Warlencourt; but the sergeant was drawing it with reversed *hachures* (the lines on a map which reveal differences of height) and these showed the site not as

a mound but as a pit. Crawford spotted the mistake and had it corrected. Telling the story, he wondered whether any of his listeners knew the spot. Wheeler knew it—very well. When the Butte had lain in Norman's-Land between the Allied and the enemy lines, he had led a sally out on to it, retrieved an enemy field-gun under heavy fire, and had won the Military Cross for his action.

His second contact with an archaeological site had been under very different conditions. It had taken place in England, some months earlier, when he had found himself stationed with his battery in Colchester, the Essex town built by the Romans after they had razed the nearby settlement of Camulodunum, capital of the king Cymbeline who had united south-east England shortly before the Roman settlement. On the western side of the town, at the point where the road from London passes the remains of the Roman walls, there stood in Roman times the massive Balcerne Gate, a proud piece of architecture that had been partially demolished, then surrounded and finally overwhelmed by the architectural accumulations of the centuries.

Wheeler, anxious to make all possible use of whatever spare time was available, gained permission from the Colchester Corporation to investigate the ruins of the Gate, which now lay beneath a public house. The result was one of the most unusual archaeological operations ever carried out by the military.

'My *modus operandi* was to detail, evening by evening, three or four volunteers from my battery and, with

their aid, to make what sense I could of the untidy burrows', Wheeler has explained. 'The nucleus of my gang was my groom, a professional groom of melancholy but co-operative nature, and one of my gunners, Max West, who had been at the Slade School and was not of a noticeably military turn of mind. To these, a variety of bodies were added, attracted less by archaeological research than by the homely noises of—and subsequent participation in—the revelry of the tap-room overhead. The excavation, if such it can be called, was conducted largely on our backs by candle-light, and was anything but a model of scientific method. But we at least did not do any irreparable damage, and ultimately produced a plan designed to serve until the removal of the public-house should facilitate corrections and additions. The whole operation was one of salvage, and now, thirty-six years later, our sketchy plan is still the only record available. The affair was pleasantly rounded off by the Corporation with a surprising resolution of thanks, which, formidably engrossed and sealed, is amongst my treasured possessions.'

This small isolated incident of constructive work in a war-time world of destruction helped to establish Wheeler's good relations with the local archaeological society, the Morant Club, and the year following his return to civilian life he once more visited Colchester, this time with the aim of discovering something of the Roman town. At this time little was really known about it; there did not exist the ground-plan of a

single house, while no one knew the exact course of even a single Roman street. However, the Corporation had on display in the Museum a collection of Roman pottery and other 'finds' which had been unearthed locally, and it was known that the foundations of Roman buildings had been discovered from time to time in Castle Park. Here, Wheeler and his colleagues worked for some six weeks early in 1920.

Nearly fifty trenches and pits were dug at various strategic points in the Park. They were the first excavations of which Wheeler had charge, and anyone watching them might have noted certain points for which his work was later to become famous. In the first place there was no 'random' digging, carried out merely in the hope that something would be found. A plan of campaign had been worked out before a spade was lifted, so that each of the trenches and pits had some particular purpose. In the second place, the whole site looked—because it was—tidy and properly organized. The casual approach of the amateur, it might correctly have been thought, had given ground to the precision of the professional.

Thirdly, and perhaps most important, not only the horizontal but also the vertical position of each 'find' was exactly noted, while a careful record was kept of the strata of occupation-debris through which the trenches were cut—the layers containing the debris left by those who had lived on the site. The value of this soon became apparent. The excavations revealed the courses of two Roman streets—the first clues

to the Roman ground-plan of Colchester—but the careful noting of the stratification revealed something else just as interesting.

Digging down, and noting carefully the level at which each 'find' was made, Wheeler and his men came first to the foundations of the Roman town. Beneath this they discovered portions of pottery which were later dated to the period A.D. 60-80. Some of the pottery showed signs of having been burnt, while it appeared that the contents of other pots had been disturbed by earth from above. And, below the pottery, there were the charred remains of wattle and daub, the building material used not only by the native British but by the Romans during the early part of their occupation.

Here was a text-book example of the way in which the careful recording of stratification could help the archaeologist, and the fact that the story of Colchester was already known from other sources in no way altered this. 'Had we no record of the destruction of the new Roman colony in A.D. 60 by the Iceni, followed by its rebuilding during the following generation, the evidence of the spade would almost justify the assumption of some such course of events on the present site', wrote Wheeler in his report of the work.

This was, of course, what he had expected and hoped—that the newer, more organized, more carefully planned, more scientifically precise approach to excavation would justify itself by results. But it was necessary to prove this on sites other than Colchester.

It was also necessary, with a wife and a young son to support, to look about beyond the dismal range of salaries then held out by the Royal Commission.

Wheeler looked—and his eye noted an advertisement for the joint post of Keeper of Archaeology in the National Museum of Wales and Lecturer in Archaeology in the University College at Cardiff. He got the job, and the fact still astonishes him. 'I had never heard of the National Museum of Wales, did not know where Cardiff was, and had a growing dislike of museums', he wrote many years later.

Nevertheless, Wheeler's appointment to Cardiff was a crucial move in his career. Wales was, in the 1920's, a country archaeologically unknown by contemporary standards, a land ready for the trained excavator, and one where problems awaited solution on a score of undug and only barely recorded sites. In addition, the National Museum of Wales was unsung and almost unknown; to build it up into fame was a task not only worthwhile in itself but one on which a man might base his own reputation.

The prospects in Cardiff were hardly encouraging. The foundation stone of the Museum had been laid by George V eight years earlier, but less than a quarter of the necessary building work had been done when the outbreak of war suspended operations. In 1920 the building was still enscaffolded, most of the collections were hidden from public gaze, and the whole project was seriously in debt.

When, in 1926, Wheeler left the Museum—of which

he had by that time become Director—building had been actively resumed, the debt had been wiped out, and the activities of the Museum itself were creating new interest in Welsh life and history. There were departments dealing not only with archaeology but with art, botany, geology, and zoology, and the Museum's aims of teaching 'the world about Wales, and the Welsh people about their own Fatherland' were being vigorously carried out.

Much of this had come about solely as a result of Wheeler's vigorous prodding and his almost fanatical belief that if museums were properly run they could interest and excite, touch human life at scores of points, and provide entertainment as well as instruction. Under his direction the staff organized exhibitions, sent out loan collections to distant towns and villages, and in a score of minor ways induced the Welsh people to take an interest in the story of the Principality. Many of them, Wheeler must have regretted more than once, had no interest at all, and he has spoken with muted horror of how, in 1924, he visited a site controlled by the Government Department of Ancient Monuments and found 'untended workmen gaily and irresponsibly heaving skeletons, potsherds and coins out of the Roman tower of Caerwent'.

Until his appointment to the Directorship of the Museum in 1924, Wheeler was concerned almost exclusively with the encouragement and development of archaeology throughout Wales. This he helped in three main ways. He lectured, both in the University

and elsewhere. He organized the movement to safety of such things as the small standing stones, some bearing important inscriptions, which rested in desolate places on the high Welsh moorland and were at the mercy of every passing walker. And he carried out, from 1921 onwards, a series of excavations each one of which formed part of an overall strategic plan for untangling the complicated story of the Principality's subjugation and intermittent occupation by the Romans.

His lectures began in the autumn of 1920. 'In those days,' he later recalled, 'archaeology was unknown academically west of Offa's Dyke. On the opening day of the university session in 1920 both my students and I, their frightened tutor, were truly pioneers.' 'Frightened' maybe, but also successful, for from the first it was obvious that Wheeler was brilliant in a sphere that has an unhappy attraction for distinctly non-brilliant lecturers. His father's insistence on clarity, his own facility for producing the illuminating phrase, allied with his pervading belief that archaeology deals with people as much as with things—all helped to show that archaeology was not just something for a few scholars, but could be of importance to everyone who had an interest in the world in which they lived.

Lecturing, administering, building up the status as well as the collections and finances of the National Museum—all these things formed an essential part of Wheeler's work at Cardiff. They were secondary both in importance and interest, however, to the grand



At Verulamium, on the outskirts of St Albans, Hertfordshire. From 1930 until 1933 Sir Mortimer helped to reconstruct the story of the area throughout the five centuries before, during, and immediately after, the Roman occupation.



Inspecting the excavations at Maiden Castle, Dorset.

At work on the excavations at Maiden Castle, Dorset, during the summer of 1936.



design of excavation on which he embarked immediately the machinery of the newly created archaeological department was in operation.

The phrase 'grand design' is chosen deliberately. For Wheeler believed that excavations should be carried out not in isolation, at random, as opportunity offered, but as parts of an overall scheme which might deal with a region, a country, or a particular phase of distant history. Thus the results obtained would not only help to solve the problems of one particular site but would also fit into a larger picture. This principle of always organizing archaeology with the bigger picture in mind, adopted by Wheeler early in his career and developed with increasing effect throughout the rest of it, is one of his most important innovations.

It is also one which illustrates the close relation between military field-work and archaeological field-work which he has often shown. The similarities of generalship in the two spheres are greater than might be imagined, and it is not entirely chance that has lifted many men of military training towards the top of the archaeological tree.

Both generals of armies and directors of excavations must have a feel for 'the lie of the land'. They must understand, on the tactical scale, how defences are governed by the range of weapons, the folds of the country, and the dead ground that it produces, the psychology and training of the defenders. On the strategic scale they must understand how river-gaps

deflect not only water but also the course of history—the Duke of Brunswick's men marching on their own feet, fought the decisive battle of the Seven Years' War in the Minden Gap, and Montgomery's troops, in the age of tanks and jets almost two centuries later, fought one of their last major engagements at almost the same spot. And both generals and archaeologists must have imagination—to foresee an opponent's actions on the other side of the hill, or to estimate how men would have acted in such-and-such a situation so many thousand years ago. They must, in fact, have more factors in common than most of them care to admit.

In 1920, Wales was the field for Wheeler's strategic planning; Wales, whose hills, as he later wrote, 'teem with the vestiges of early man; much of the evidence is unmapped, and of most of it we shall know nothing substantial without systematic excavation carried out, as it often must be, in remote and storm-ridden uplands with little expectation of more than the most meagre reward.' The field was vast, both in area and in time. Wheeler therefore chose to concentrate on one particular period, on unravelling the story of what happened in Wales during the Roman occupation. He determined, also, that in the process he would develop and elaborate the methods used with such success by Pitt-Rivers almost half a century earlier.

Fortune has at times a happy knack of favouring the brave. It did so in this case. One of the first aims in

Wheeler's plan was to excavate a major Roman fort within whose walls had lived the troops who helped to rule Wales—intermittently at least—during the first few centuries A.D. And, early in 1921, he was invited to take over the excavation of Segontium, the Roman fort whose remains on the outskirts of Caernarvon had still, archaeologically speaking, barely been touched.

This was Wheeler's first major dig. It continued throughout the seasons of 1921, 1922, and 1923, and it exhibited certain features which were to become familiar to all those who took part in his work during the following years. First of all, there was not merely R. E. M. Wheeler. There were, as they came to be known, 'the Wheelers', for Tessa Wheeler played an essential part in the scheme of things, taking over the administrative duties of the excavation, a task for which she was doubly qualified by her charm and her knowledge of the work in progress.

Secondly, the Wheelers gained the co-operation of many students, who took part in the actual excavating, a move considered risky by those who knew the damage which can be caused on a site by untrained workers; but it paid magnificent dividends, both for the Wheelers in terms of friendship and for archaeology in terms of properly trained excavators. Scanning the lists of Britain's leading archaeologists today it is difficult to name many below the age of fifty who have not, at one time or another, dug with Wheeler.

Thirdly, there was the briefing of everyone to ensure

that the aims of the excavation were really understood; the discipline on the site, which was a revolutionary change from the casual digging of the pre-war years; and, perhaps most important of all, the great care taken to make sure that as the remains of the past were removed, layer by layer, an exact record was kept of each.

The results more than justified what were no doubt considered by some to be abnormal efforts at precision. Segontium had been built down the hill-slopes from the Celtic Iron Age fort on Twthill, but high above the modern town of Caernarvon; little was known of its detailed occupations. The Wheelers' excavations revealed that it had first been a timber fort, raised about A.D. 75 and rebuilt in stone at the turn of the century. It had been evacuated about forty years after that, reoccupied in the third century, evacuated once again, possibly partly reoccupied by the local people, and finally reoccupied by the Romans for about ten or fifteen years during the latter half of the fourth century.

All this and much more was revealed—not merely from the brooches and the beads, the pottery and bones and inscriptions that were carefully extracted from the remains. The older archaeologist, whose methods the Wheelers were replacing, would indeed have been able to deduce a lot from this material, from the style, workmanship, and substance of the 'finds'. But only the use of stratification, of recording the exact vertical depth of different road-layers and wall-foundations, of making sure that no 'find' was removed until its

precise position had been recorded—only this enabled such a detailed picture to be built up of exactly what had happened in this distant frontier post of the Roman Empire more than fifteen hundred years previously.

The extent of that detail was shown not only in the report of the Wheelers' work, *Segontium and the Roman Occupation of Wales*, but in a lecture on 'History by Excavation' which Wheeler gave to the Royal Society of Arts in London. His aim was to show just how much could be accomplished by abandoning the methods of his predecessors for the new scientific approach to excavation. To do this he produced two sections—drawings of the horizontal strata at Segontium.

The first of these drawings showed a vertical section cut across a Roman road where it passed between the guard-towers of the Segontium fort. 'It will be seen,' he said, 'that the roadway is really three roads, one superimposed upon the other. Each is of iron-hard road-metal, built, in characteristic Roman fashion, for all time. Now in the process of excavation each of these roads was peeled off separately and with scrupulous care, and the relics which each obtained were segregated and examined. The two lower roads were found to coincide with the building and rebuilding of the fort during the earlier periods of assured and leisurely Roman settlement. The last and uppermost road told a different story. Into it were thrown the battered columns and building-stones of a fort which had been destroyed or utterly neglected—vivid witness

to a period of anxious reconstruction in a time of urgent re-occupation. With the columns beneath the road-surface lay a number of those small and almost worthless coins which were yet sufficient to show the period of the work and thus indicate its cause. The reconstruction was of late fourth century date, carried out therefore amongst the last despairing acts of the Roman Command, harassed on one flank by the Saxons and on the other by the Irish, and with the Picts of Scotland upon its back. The fallen column seen in the photograph, covered by the last of the Roman roads, is a landmark in the history of Britain.'

Here—although Wheeler would be too modest to admit it—was a new and refreshing approach to archaeology, an approach which looked back at the past not only in terms of epochs and dynasties and dates but in terms of men and women whose troubles were not so very different from our own.

The second example which he gave was an even better one of the way in which archaeological detective-work can re-create the past in surprising detail. It showed a section across the cellar or strong-room built for security within the regimental shrine of the fort; and Wheeler's claim that it was 'replete with the early history of western Britain' was no exaggeration.

'Silver coins of early third century date in the floor of the cellar show that it was built during the great military revival which accompanied and followed the visit of the emperor Septimius Severus to Britain—the emperor whose dying effort to subdue Scotland

represents the last attempt of Rome to complete the conquest of these islands,' he said. 'The death of Septimius at York in 211 was followed by a century of intermittent bloodshed, and the fort was then abandoned. Earth drifted through the doorway of the strong-room and thickly covered the steps, as can be seen in the drawn section. With the steps, it covered the smashed money-box and a hoard of coins—scattered and forgotten in the hurried departure of the garrison. Later, in the last stand to which I have referred above, the fort was reoccupied and rebuilt, the cellar was filled up with an altar and the debris of ruined buildings, and covered by new floors which were themselves subsequently renewed. Coins and pottery show that, as at the gateway, this period of drastic reorganization fell within the last half-century of Roman rule in Britain. . . .'

Here was proof that it was indeed possible to popularize archaeology, yet not vulgarize it. And more than one listener, walking home that night, must have wondered at what point a Roman paymaster had turned to his subordinate with a horrid doubt in his voice, and questioned him as the legionaries marched back through the Welsh defiles and the wiry tribesmen waited in the slips.

That one does wonder, not about the impersonal problems of the past but about the people who had to solve them, is a measure of Wheeler's success. Yet the excavation of Segontium was no less an academic success than a popular one. The methods had been

justified. The first object of the exercise had been attained, and it was now necessary to swing all available forces towards the next, the excavation of a Roman fort in South Wales. The Gaer, a couple of miles from Brecon, was an ideal site, and in 1924 and 1925, the process was repeated. More details of the relationship between the Romans and the local tribes were discovered; more students from the universities were taught the rudiments of the excavator's art. And, once again, a clear record of the operation was quickly produced.

This rapid publication of results is a point which Wheeler has increasingly stressed. Pitt-Rivers had stated, years before, that 'a discovery dates only from the time of the record of it, and not from the time of its being found in the soil'. For excavation is destruction; and the force of Pitt-Rivers's remark, made when serious excavators could be numbered on the fingers of one hand, was immeasurably stronger by the 1920's. In the late 1940's, when Wheeler was in charge of the excavations for the whole sub-Continent of India, publication nearly became a bottle-neck limiting work.

However, publication—particularly if it is of the standard on which Wheeler from the first insisted—takes time. And time, he began to find, was becoming an ever more valuable commodity. He had been in great demand as a lecturer ever since the day in 1921—the traditionally unlucky Friday, 13 May, he recalls—when he had given his first public discourse, at King's

College, London, where he had spoken on the problems presented by Welsh hill-forts. He was, he has said, 'in a state of acute terror'. However, the 'first-night nerves' failed to affect his content or his style, and from this date onwards he was in growing demand by universities and learned societies in all parts of Britain.

He was a young man, and he had young ideas; but it was not always clear to the more conservative of his listeners that he was introducing new techniques, new theories, a completely new approach, for he often dealt with old problems. Speaking a few years ago to the Society of Antiquaries, of which he was by then President, he recalled one incident which must have been acutely discouraging. 'I remember also how on one occasion in this room in my youth I got up to read a carefully prepared paper on a new prehistoric beaker which could not fail, I felt, to make a deep impression on the Fellowship before me,' he said. 'As I began, a husky voice came from the midst of my audience, uttering, in terms of withering scorn which I cannot simulate, the words "More Beaker-folk", followed by much scuffling as the owner of the voice struggled for the door.'

Between lecturing, and writing reports of major excavations as well as notes on minor discoveries, between running the National Museum of Wales and encouraging the Welsh to take more interest in the multitudinous clues to the past that lay scattered across their country, Wheeler was mustering his forces

for a major assault on a site of unparalleled interest. This was the great Roman fortress of Caerleon, home of the Second Legion for more than two centuries and the base from which the Roman Command planned its operations in South Wales. Beneath the accumulated debris of centuries and the grass of years there lay the garrison, home, and administrative centre which might, with good planning, provide a detailed picture of what had happened in South Wales between the coming of the first Roman troops and their eventual withdrawal more than four hundred years later.

The excavations would obviously involve a major operation, to be carried out over a number of years. Wheeler therefore decided to start work on the oval hollow which lay outside the walls of the fortress. This site, known to the local people as 'King Arthur's Round Table', was that of the Roman amphitheatre; it was available for excavation, and it was free of modern buildings. Once the details had been fixed, Wheeler announced his plans to the Press—a move in a long campaign he had conducted since the 1920's to interest laymen in archaeology. In this case he also had hopes that funds would be provided for the lengthy and expensive work in hand. These hopes were more than justified; within twenty-four hours *The Daily Mail* had agreed to finance the excavation in return for exclusive news of the work. Later, the site was presented to the nation.

The Caerleon excavations, which began early in 1926, were among the most ambitious to be carried

out in Britain. More than twenty thousand tons of earth had to be moved. More than seven hundred feet of light railway had to be laid down to help clear the eighty-odd tons of debris which were removed every day—an operation which was disrupted by the outbreak of the General Strike. And arrangements had to be made to organize and instruct those sight-seers, visitors, and school-children who crowded to the site when the excavations began to produce interesting results.

Much of the work at Caerleon was planned by Wheeler before a single trench had been dug across 'King Arthur's Table'. He laid his plans carefully; not only was the digging designed to produce maximum results with the minimum left to chance but its repercussions were correctly forecast. By the time Wheeler broadcast to the nation in April on the first results of the work it was obvious that 'King Arthur's Table' was an archaeological goldmine; as digging progressed throughout the summer this became even more clear.

The shape, size, and structure of the amphitheatre all slowly but surely became evident as the excavators stripped away layer after layer of the debris which had accumulated throughout the centuries. Many of the finds were exciting in themselves. There was a lead 'theatre ticket', admitting some unknown soldier to some unknown entertainment—most probably a bloody combat fought out on the arena once bounded by the rising tiers of stone benches. There were brooches

and coins and necklaces, and a cut-glass beaker which showed a chariot-race in progress.

All these finds helped to build up a three-dimensional picture of what life had been like when the amphitheatre was in regular use. Alone, however, they would not have 'dated' the structure, or indicated what changes had been made to it during its long period of use. Evidence of this had to come from the remains of the building itself and the debris on, about, and under those remains. It was here that Wheeler's emphasis on the need to record this evidence in the most minute detail brought dividends; and it is very unlikely that the story of the Caerleon amphitheatre would have been reconstructed with anything like the same accuracy had it been dug by anyone else.

How this recording dated the various changes of fortune through which the building had passed was explained by Wheeler in his talk to the Royal Society of Arts which has already been quoted. For this he used a section showing stratification in relation to the external wall of the amphitheatre, drawn by V. E. Nash-Williams, the archaeologist who was in charge of operations on the site under Wheeler's general direction. And the way in which the various layers of debris could be related to the wall did, quite clearly, give valuable information about the date of the building.

Other evidence which came to light as the work progressed confirmed that the amphitheatre had been built towards the end of the first century, altered at

some later date, probably about the year 200, and had later still been used for a different purpose—‘at a period’ commented Wheeler, ‘which one would like to associate with King Arthur.’ But the Arthurian link, to the disappointment of those romantically inclined, was never found.

What was pieced together was an astonishingly detailed picture of Caerleon in the days when it was supplying garrison troops for the various forts and outposts whose troops ‘showed the flag’ and did their best to keep order on the fringes of their known world.

The amphitheatre had been built, Wheeler and his team discovered, by eight separate companies of the 3rd cohort—or battalion—of the Second Legion. Each company had been responsible for one of the eight segments, which were divided by steps and led down towards the arena; each, when its work was done, proudly inscribed its commander’s name in a prominent position on the stone walls.

Constant care on the site enabled the picture of these eight segments of the buildings to be seen in such detail that little was left to the visitor’s imagination. ‘A broad flight of steps leads down from the higher level outside the building to a small platform on the level of the arena,’ Wheeler wrote at the time. ‘On both sides of this platform, lateral passages led by steep flights of stone steps to the adjacent seats. Half-way up, these steps turn at right-angles, and at the turn is a collector’s pedestal, on which the ticket collector, or perhaps a Roman policeman, was stationed. At

the foot of the stairs is a small square room, originally vaulted, in which the spectators, as they approached their seats, could see the wild animals destined for the scenes of hunting or combat within the arena.'

So exciting was the picture which Wheeler and his team had built up that C. B. Cochran, the theatrical producer, wanted to hold a series of plays, chariot races, and 'contests of strength' in the newly revealed building—a proposal to which the authorities appear to have turned a rather unfriendly eye.

Excavation of the Roman fortress at Caerleon has continued under a number of directors, and it has produced a succession of discoveries which have added to our knowledge of life in Roman Britain. However, it has never again caught the imagination of the public with quite the same fire as it did a third of a century ago, when thousands of people realized for the first time not only what archaeologists were doing but why they were doing it. In this respect Wheeler's work was something more than a masterpiece of excavation. It also brought to light a public interest which had not been suspected; this interest was to become more important as the social pattern changed and funds had to be obtained not from a few rich men but from many who were far less rich.

The Caerleon excavation marked the end of one phase in Wheeler's career, for before it was finished he had left Cardiff for a new post in London which offered more scope for his developing powers. When he left the Principality in 1926, archaeology there had attained

a status totally different from that which it had held in the dismal days of 1920. There were now numbers of flourishing archaeological societies; interest in the subject was great; and there was, as Wheeler pointed out in the preface to his *Prehistoric and Roman Wales*—his parting gift, as it were, to the Principality—a ‘demand for a comprehensive survey of ancient Wales in relation to the prehistory and early history of the adjacent lands.’ The book, which he modestly called ‘a small scrapbook’, was in fact a comprehensive survey of the position in the light of the facts as they were then known. The facts would have been far less numerous, their significance far less appreciated, if the book had been written before Wheeler had gone to Cardiff six years previously.

Now, however, he was off on another adventure.

LONDON AND ST ALBANS

WHEN Wheeler came to London in 1926 to take up an appointment as Keeper and Secretary of the London Museum he was already—at what was, for an archaeologist, a ridiculously youthful age—one of the profession's most 'promising' men. He was also one of the most ambitious—ambitious not for himself but for the art, science, or craft of archaeology, which he believed to be making the least rather than the most of its opportunities.

For this reason, Wheeler's plans covered more than the reorganization of the London Museum, then passing through one of its less happy phases. They included the formulation of a scheme for the systematic excavation of Roman Britain—an ending of the slightly haphazard system by which badly needed funds were apt to be frittered away on a succession of excavations, each one carried out without any proper relation to the others. And they included a scheme for setting up an institution where potential archaeologists could be trained in the mounting number of skills and disciplines which their calling demanded.

The development of these three main lines of advance



Sir Mortimer at Maiden Castle in 1936 with the plans showing exact positions of finds that typified his methodical approach to excavation. Between 1934 and 1938 he succeeded in tracing the story of the magnificent earthwork back through nearly four thousand years.



At Bindon Hill, on the Dorset coast between Lulworth Cove and Arish Mell. Here, in 1950, Sir Mortimer investigated a linear dyke built by ancient invaders to protect their beach-head. The photograph shows the reconstruction of a stockade of the type believed to have been built by those who held the area against the local inhabitants.

on the archaeological front was to continue—with a number of minor thrusts—for the thirteen years that were ended by the outbreak of the Second World War in 1939. And it was during this period that Wheeler's position became firmly and securely established—a point which should be made in view of the blaze of publicity turned on his activities twenty years later when he carried his archaeological campaign into the television field.

The London Museum formed the headquarters for his planning. It had been opened in Kensington Palace in 1912 with the general idea that works of art, and curiosities connected with the history of London, should be assembled in it and displayed to the public. It had subsequently been moved from the Palace—to which it has since returned—and had been established in Lancaster House, once known as Stafford House and a building whose former grandeur was indicated by Queen Victoria when she commented to its owner: 'I come from my home to your Palace!'

The Museum had suffered from lack of proper control, and while its curious and haphazard collections could provide an afternoon's casual entertainment for the visitor with no knowledge and much imagination, it is doubtful whether they were serving any much more serious purpose early in 1926.

Wheeler put the Museum on a sound professional footing, reorganizing the exhibits so that at last they began to illustrate the story of London through the

centuries. He established a firm link between the Society of Antiquaries and the Museum, which soon came to be regarded as one of the capital's founts of archaeological wisdom. And he succeeded in interesting thousands of laymen in the story of their city for the first time.

One of Wheeler's most successful methods of what might be called 'popularization without vulgarization', was the writing and publication of a series of guides to the Museum. These were very different from the customary run of guides, and the fact that they were written to enlighten the uninformed rather than to dot the i's and cross the t's of the expert, might well have brought down on the writer's head the scorn of other scholars. The authoritative verdict on this aspect of the famous London Museum guides was given in *Antiquity*, that unique journal run by O. G. S. Crawford with vigour, frankness and, where necessary, an outspokenness that made strong men blench. 'It has been stated on good authority that this is the best museum catalogue that has ever been written,' he wrote, in describing *London in Roman Times*. 'We entirely agree. It is yet one more proof that wide learning and scholarship and a good style, so far from being incompatible, are a necessity for the writer of a popular guide-book. We fancy that the secret of Dr Wheeler's remarkable output of first-rate books is to be found in the speed with which they are conceived and composed; that they are envisaged as a whole before they are begun, and that they are finished

before the iron has time to cool. That may also account for the fact that they are readable.'

This was not the first of Wheeler's London Museum catalogues. Writing in his spare time—much as he had written his *Prehistoric and Roman Wales*, which was, he says, 'scribbled hastily in railway carriages and country inns'—he had already produced 'London and the Vikings'. This was a prototype for the book on Roman London that came in 1930, a volume which with 210 pages, 61 plates, and 58 figures in the text for 2s. is an indication of what could be done in book-publishing thirty years ago.

Wheeler's *London in Roman Times* was not really a museum catalogue at all in the accepted sense of the word. It was, instead, an exciting story of how London had been founded and had grown during its early years. It was a story which began with an account of a tournament outside Rome in which the legions made a mock attack on a British township, a sort of historical pageant (complete with captive tribesmen) to show the populace of the capital how the legions marched across Europe and embarked in the galleys for their crossing of the English Channel. It was a story vivid with thrilling detail, and only after the entire picture had been painted did there come the list of Museum exhibits, each one of which now fitted into a carefully prepared place in the reader's mind.

The success of these catalogues was partly due to what can be called Wheeler's strategic approach to his untrained audience. There was also the fact that

his enthusiasm was genuine. But chiefly there was his contempt for what Americans today call gobbledegook. This latter virtue was somewhat rare among scientists, and Wheeler, speaking at the British Association a few years later, issued his own warning when he said: 'We have today in science a body of young men fresh from the University who refuse to use a short word if they can find a long one. They cannot understand the virtue of that simplicity which is real artistry. These learned and in many cases admirable young gentlemen have developed a disease—a passion for obscuring their own knowledge, clouding their science, and befogging listeners.' There was no obscuring, clouding, or befogging when Wheeler expounded his beliefs.

One of these beliefs was that the excavation of Roman Britain should be carried out in accordance with a national plan. For there were two dangers in this period between the wars—both of which still exist, though perhaps in a less serious form. One danger was that of the raw material of archaeology, the evidence of the earth, being destroyed through ignorance or lack of care; when new buildings were erected in towns, the chance finds of foremen or navvies or contractors might well go unrecorded, or, if kept at all, might be treated merely as curios. In the country, whole areas might be devastated before any action could be taken by archaeologists—'carting away English history by the lorry-load' as Crawford once called it.

The second danger, the lack of any overall plan of

campaign, was outlined by Wheeler when he raised a metaphorical eyebrow at the news that the Roman station on the Lincolnshire wolds at Caistor was to be dug. 'During the past ten years, we have been hacking up this Roman Britain of ours with unprecedented zest', he pointed out in *Antiquity*. 'Some of the work has been fruitless through mere incompetence; some has been equally fruitless through lack of adequate publication; some has been fruitful, and we can honestly say that our knowledge of Roman Britain has, in certain directions, increased generously during this period. But how much effort has been wasted both in detail and in bulk, from the absence of a concerted plan of campaign.' So far as he was able, informally, by advice, and by constant propaganda—as well as by his comments in a study of Roman London made for the Royal Commission on Historical Monuments—Wheeler supplied something of a plan.

His interest in Roman Britain was due not only to the fascination which the period itself held for him. He enjoyed stretching his capabilities on an exercise that made the sternest demands. 'No branch of British field archaeology can compare with that relative to Roman Britain as a practical basis for a sound general archaeological training,' he wrote in *Discovery* in 1929. 'On Roman sites alone can be guaranteed, for the student, a sufficient richness of material, clearness of stratification, and variety and interest of technical problems, to ensure an adequately comprehensive experience in the basic principles of field-work.'

While this concentration on Roman Britain continued to develop after his appointment to the London Museum, there came in 1928 a minor but unusual excavation that barely fitted into his general plan.

H. V. Morton, the journalist and writer with a particular interest in London, induced the *Daily Express*, for whom he was then working, to finance an excavation at Brentford, on the banks of the Thames. Here, beside a river that had been far lower and probably far wider in prehistoric times, one particular battle was believed to have been fought—between Bronze Age lake-dwellers and the vanguard of the Iron Age invasion which succeeded them, a significant event in the story of Britain.

Twenty longshoremen and half a dozen University of London students were recruited for the operation, which included a succession of slimy and uncomfortable investigations carried out at low tide but even then reaching down below water level. Working up to their knees in water, under Wheeler's direction, the team discovered the fragile remains of a Romano-British pile-dwelling. Once again, careful attention to the depths at which various items lay increased the value of the discovery. For not only was Roman pottery found at a higher level than the wicker-flooring of the hut, but a Roman roofing tile was found at a lower level—a clear indication that both pre-Roman building methods and pre-Roman environment continued into Roman times.

The Brentford investigation, however, was only a

minor affair compared with the operations directed by Wheeler and his wife throughout the summers of 1928 and 1929. These were at Lydney, on a spur two hundred feet above the banks of the Severn in Gloucestershire, on a site which had last been dug in 1805. The results of these early nineteenth-century investigations left many gaps in the knowledge of exactly what had happened on a site known to have been occupied since pre-Roman times. It was now felt both by the owner of the site and by the Society of Antiquaries that a scientific excavation might produce a complete picture of its past.

Wheeler was invited to direct the work. And for two summers he and his wife, aided by the now usual supporting teams of students, laid bare the story of the Lydney settlement. The outline of the pre-Roman village, the infiltration of Roman customs, the cutting of a Roman iron-mine inside the settlement's bounds, and the development of the site as a place of pilgrimage, towards the end of the Roman occupation, when a shrine to a mysterious god Nodens was built—all these things could be discerned from the evidence. That the story could be read so clearly was largely due to the care with which the excavation had been planned and the systematic thoroughness with which it had been carried out.

However, chance enters into all things, even the best-laid plans of archaeologists, and at Lydney there occurred one of those dramatic and unexpected happenings which have no part in the archaeologist's

plans, which in some ways offends his sense of order—and on which he yet looks back with exhilarating enjoyment.

Wheeler was sitting at lunch time with a number of colleagues, looking down at a fourth-century mosaic which showed as the floor of a partially excavated building. At one place the mosaic had been destroyed and then filled in with a patch of ugly cement. Nearby lay a pick. It was, after all, the lunch-break, and for the moment there was nothing to do.

‘The conjunction of idleness and opportunity was too much for me. I drove the point of the pick into the cement patch,’ Wheeler wrote nearly thirty years later. ‘What happened then is graven on my memory. As the lump of cement came away, the dark soil beneath it was of a sudden freckled with minute green specks. On my knees I peered at these specks without touching them further, then called for the camera, and putting down the only coin in my pocket—a monstrous half a crown—as a scale, photographed the scene at short range. Thereafter a quickly measured section was drawn to illustrate the vertical relationship between the specks, the cement, and the mosaic; and finally we proceeded to recover the specks carefully from the earth and to place them in a teacup. The cup was little more than half full when the supply came to an end; nevertheless, we found that it contained no fewer than 1,646 of the tiny scraps.

‘Hasty analysis showed that the collection comprised, with fragmentary Roman bronze coins or their

barbaric imitations, an astonishing range of crude smaller coins descending in regulated scale to microscopic stamped discs of which fifty-two could be placed side by side on a single halfpenny!

All the details of the remarkable Lydney Hoard were given by Mrs Wheeler in the published account of the excavations, a hoard of Dark Age money which, Wheeler wrote later, 'would alone have justified our two seasons' work on that lovely spot.'

By the time that the results of the Lydney excavations were published, the Wheelers were deep in what was, then, their most ambitious work. This was nothing less than the reconstruction of the story of St Albans throughout the five centuries preceding, during, and immediately after, the Roman occupation.

St Albans is today a prosperous market town standing some twenty miles north of London on the little river Ver, and on A5, the road which follows the Roman Watling Street for the first portion of the modern road's journey from London to Holyhead. In 1930 it was known that the walled and embanked area, two hundred acres in extent, which lay to the south-west of the modern city, was the site of Roman Verulamium. All else was conjecture. But it was believed that the Roman settlement had been built on the site of a pre-Roman Belgic capital; and that Caesar's decisive victory over the native Britons had been won somewhere near St Albans in 54 B.C. However, these two last points were merely supposition; all that could safely be said was that St Albans and its immediate

neighbourhood must have formed the focal point of operations which took place during a vital, but shadowy period of Britain's history.

In 1930 the civic authorities of St Albans bought nearly half of the site of Verulamium, the Roman *municipum*, and decided that it should be properly excavated before being laid out as a park. They approached the Society of Antiquaries, and the Society suggested that Wheeler should carry out the work.

Now the problem of St Albans and its distant past stretched not across a relatively small area, as at Caerleon, but across a whole countryside; further, it stretched across five centuries. It demanded, in fact, all those particular qualifications which the efficient excavator must have, and which Wheeler once listed as 'scholarship, experience, literary ability, and (not least) knowledge of mankind, and the power of command'. All were to be required before the story of Verulamium was at last pieced together after four seasons of excavation.

Early in the summer of 1930, the Wheelers started operations. These were carefully planned, so that the results of one phase led naturally to the next; the excavation of Verulamium and its surroundings was, in fact, not unlike the developing stages of a major battle.

This was fought, as on previous occasions, by Wheeler, his wife, and teams of university students. This time, however, there were two additions to the team. One was Wheeler's son Michael, now aged

sixteen. The other, a man who was to play an important part in Wheeler's work during the next thirty years, was M. B. Cookson, now Britain's leading archaeological photographer. From the days of his first excavations, Wheeler had realized the importance not only of producing intelligible reports but of using to the full the power of the camera. Long before the 1920's, archaeologists had, of course, used photographs to illustrate their work; but they had only rarely used the camera to emphasize, to select, to illustrate with one particular aim in mind—to do those things that the camera can do at least as adequately as the artist; and can do, on excavations, far more conveniently and quickly. Wheeler seized on this new tool, and from the mid-1920's onwards used it with increasing success.

In this he was constantly helped by Cookson, who had specialized in museum-work and who had first met Wheeler in the London Museum. Shortly before the Verulamium excavations began Cookson was asked if he could, without too much difficulty, photograph not only the 'finds' that might result but, more important, if he could make clear photographic records of the various strata as these were uncovered by the work's progress. He agreed to try. He succeeded, and thus began, in the summer of 1930, a contact with archaeological photography that has developed throughout the years, and which had led him to his present post as head of the photographic department at London University's Institute of Archaeology—

the organization which, as we shall see, Wheeler was to set up in the 1930's.

The first task at St Albans was to find out whether Verulamium had been built, as suspected, on the site of the pre-Roman settlement that was thought to have been the headquarters of the tribes then living in this part of Britain. This problem was solved by digging pits within the area bounded by the Roman walls, and by cutting a section through the walls themselves. The pits failed to reveal any traces of pre-Roman occupation, while the section through the defences showed that these had been built not earlier than the second century A.D. Verulamium, therefore, had been built on virgin soil. The capital of the legion's adversaries nearly two thousand years before had to be sought elsewhere.

The most likely site of this capital now appeared to be west of the Roman walls, where a triangular-shaped area was enclosed by earthworks which were substantial enough to be marked on the One-Inch Ordnance Survey maps, but whose date was unknown. The need to investigate this site obviously increased the work to be done, as Wheeler pointed out in *The Times*. 'The problems which face the excavators next year are thus of considerable magnitude, whether regarded in terms of history or of geography,' he wrote. 'The Roman walls alone are two miles in length, and enclose two hundred acres. The outlying earthwork, upon the proper excavation of which so much of historical interest depends, adds another thirty acres to

the area under investigation.' Unfortunately, the problem still remained unsolved when the outlying earthwork had been investigated. For what it disclosed was not a pre-Roman settlement but merely the site of an early Roman city which was later extended to form Verulamium itself.

There remained a third possibility. For there is an area of complicated and extensive earthworks which lies in Prae Wood, higher up than the earthworks that had already been investigated, and stretching across the top of a plateau from which the ground slopes down towards the River Ver. Here, after the diggers had cleared the tangled undergrowth, carefully removed the surface layer by layer, and drawn sections showing exactly where the various finds had lain, part of the solution was found. But, presented with the solution, was yet another and perhaps even more puzzling problem. The earthworks in Prae Wood certainly included the nucleus of a pre-Roman city; but the Roman remains associated with them came from a period long after the Caesarian period. There was a gap in the story.

In the hope that the gap might be filled, attention was turned to a long earthwork, marked on the maps as Devil's Ditch and Beech Bottom, which stretches north of Verulamium across the valley of the Ver and the higher country reaching towards the River Lea. Planned digging, plus the lucky disclosure of coins by workmen laying a sewer across the ditch, dated the earthwork as pre-Roman. A little imaginative map-

work suggested that this was, in fact, a defence line built across the country between the two river valleys and ending near the village of Wheathampstead, where a ford, now supplemented by a bridge, still crosses the Lea. Nearby lay the remains of a major earthwork, almost entirely neglected until then. Excavation showed that it had been built before 20 B.C., and further work left little doubt that it was here, rather than at any of the sites near the Ver, that the Belgic tribes had made their last major stand against Caesar.

While this general picture of events in the area was being built up, excavation was continuing at St Albans. Here, throughout the seasons from 1930 to 1934, there was steadily unearthed the details of the finest Roman site in the south of Britain—a fine stretch of the city wall, tessellated pavements, and the foundations of the buildings which once rose above them; and, unique in Britain, the Roman theatre with its colonnaded stage. These clearly visible, easily understandable, examples of Britain's Roman past were the things that caught the imagination, drew the crowds of sight-seers, and helped to make Wheeler's name known. More significant to the advance of archaeology were the tactics which had been used to build up a general chronological picture into which such details could be set.

The work was partially completed when it had suddenly to be suspended. Plans were announced for a hundred foot wide arterial road which was expected to cut across both the Belgic settlement and the Roman city. The excavation committee had only a limited

amount of money, and thought it wise to conserve this for use in an emergency excavation when the exact line of the road was decided upon.

Work continued on a smaller scale, but there was no longer any need for the same direction. Wheeler and his wife turned elsewhere.

DIGGING FOR THE PAST, TRAINING FOR THE FUTURE

MAIDEN CASTLE, the huge hill fortification with its quadruple line of earthworks, rises on the Dorset Downs a few miles south of Dorchester. When the Wheelers began work there in 1934 virtually nothing was known about the site. Four years later, they had succeeded in tracing the story of Britain's most magnificent earthworks back through nearly four thousand years of history. The achievement, even in the present age of great archaeological progress, still has a lustre that makes it unique.

Maiden Castle lies four hundred and thirty feet above a minor tributary of the River Frome, and its imposing defences, its air of standing isolated from the rest of the world, have all impressed generations of men who have known nothing of its story. Yet it was not only this which gave the excavations their particular quality. The personality of the Wheelers; the obvious delight and enthusiasm which they brought to the job; the equally obvious enjoyment of the students and other young people who helped them; the simple fact that



Sir Mortimer showing students round the Roman remains at Viroconium.

Sir Mortimer (left) with Glyn Daniel drinking mead from a bone horn on television. The two archaeologists also ate—or at least tasted—what was believed to be a replica of Iron Age gruel.





Sir Mortimer (right) inspecting a plan showing post-war excavations at Verulamium on the outskirts of St Albans. On the lower left can be seen labels indicating the various strata of the section which has been cut.

everyone formed part of a team—all these things combined to make the Maiden Castle excavations almost a national institution.

Many famous men who had little or no connection with archaeology were drawn to the site, and in his autobiography, *Still Digging*, Sir Mortimer—as he was by the time he wrote it—mentions John Drinkwater, T. E. Lawrence, and Augustus John. But it was not only the great who were attracted. It has always been one of Wheeler's beliefs that the archaeologist has a duty to explain what he is doing—and why. Here, on the fringe of holiday country, was a chance which he seized with both hands. Visitors to the site were encouraged, and a rota of students was set up to act as guides. Postcards showing various aspects of the work were printed, and no fewer than sixty-four thousand of them were sold on the site. Interim reports outlining the current progress of the operation were printed and sixteen thousand sold at 1s. each. Scraps of surplus pottery were marked in Indian ink and offered for a few pence. All these imaginative methods helped to interest the layman in what was being done before his eyes.

The Press Conferences which Wheeler held at Maiden Castle also helped. These, like some of the other innovations, were regarded with critical eyes by the more conservative members of the archaeological profession, not all of whom had Wheeler's facility for popularization without vulgarization. The Press Conferences were inaugurated after he had found—

possibly with memories of his father in mind—the day of the week and hour of the day at which the local papers went to press. Then he fixed a time convenient to the papers. Following that, journalists would be invited to meet him on the open downland once a week, to hear a report of what had been done during that week, and to ask any questions they wished. 'The Press', Wheeler wrote later, 'is not always accurate and does not always emphasize those aspects of an excavation which are scientifically the most important; but sympathetic help from the directors of excavation is the best corrective of those failings, and may be regarded as a scientific no less than a social duty on the part of the modern archaeologist.' This help he gave, and although the system minimized the chances of any newspaper getting an exclusive account of the work in progress, it removed any excuse for inaccuracy and it enabled the staff to carry on without undue interruption.

This staff consisted of the Wheelers, Cookson, William Wedlake, the 'foreman-archaeologist and friend' who marked out the sections to be dug and who supervised their digging, a varying band of professional archaeological assistants, and a few score students who came not only from English universities but also from Canada, Bengal, Ceylon, America, Germany, and Assam. As the work progressed, Wheeler held regular briefings at which those engaged on the site were given a general picture of the immediate prospects; were told the reasons for the particular work in hand; and were thus

able to understand not only their own individual tasks but also those of their companions.

Work started at eight in the morning and continued until five at night—and it steadily revealed that the story of Maiden Castle was an extremely complicated one. Week by week the unravelling of the various earthworks slowly proved that the earliest settlement had been about 2,000 B.C. There had been a movement of population downhill during the Bronze Age—from about 1,500 B.C. until about 500 B.C.—and at the end of this period the first main defences were raised, on a small scale and covering a mere sixteen acres.

These defences were extended about a hundred years later, and a high parapet was added, stones from which, Wheeler's team discovered, had been moved down from Maiden Castle within living memory for use in cottages or field walls. Then, about 100 B.C., the major reconstruction took place and Maiden Castle was surrounded with its complicated lines of earth defences, their intricately guarded entrances, and the green corridors through which attackers had to run the gauntlet of prehistoric shot—the sling-stones of which more than twenty-five thousand were found within the perimeter, and which came from the Chesil Bank running along the nearby Dorset coast.

Most of these defences had been built from a single raw material, chalk; and the forty-five acres they enclosed had been lived over or fought over for up to four thousand years. What had happened there would

not have been disclosed with the same minuteness or with the same accuracy had it not been for the precise methods evolved by Wheeler during the previous twenty years.

Pick and shovel are of course the most obvious tools for excavation, but they are useless for finer work, and at Maiden Castle the small trowel and the camel's-hair brush came into their own. Not every visitor could understand why a watch-maker's precision was sometimes called for. On one occasion, for instance, Wheeler was digging a small area with a teaspoon, carefully removing the debris that surrounded a particular find. 'What you want,' remarked a helpful visitor looking down at him, 'is three hundred men to whip the whole of the surface off.'

Wheeler was 'the boss'. He knew what he wanted and he kept a firm hand on all branches of the work, even though he might leave the technical details to others. In the case of photography, for example, he would explain what he particularly wanted to illustrate—perhaps the form of a certain pit which had been dug, and the stratification of one of its walls. It would then be Cookson's task to deal with the technical problems raised; to appreciate that the pit's wall and its floor would merge in a brilliant glare if both were lit by the sun; to realize that if the wall were in shadow and that shadow cut across the pit floor, the photograph would tend to confuse the shape of the pit; and to decide that the pit could only be properly photographed during a few minutes each day—just as

the shadow crept up and touched the base of the wall.

The hundreds of photographs, the drawings of numerous sections, the careful analysis of the finds—all these helped to reveal information of two different sorts. For it enabled Wheeler and his colleagues to describe what the settlement was like in previous centuries; and it enabled them also to describe, in truly astonishing detail, some of the events that had taken place there.

The earliest inhabitants lived in a Maiden Castle defined by at least three rings of entrenchments, hewn from the chalk with picks of horn salvaged from the carcasses of the red deer which then teemed in the forests below the Downs. Nearly two thousand years later one might have seen the enlarged Maiden Castle at the height of its prosperity.

‘One would approach it from the east by one of the two winding ways which ran between high stone walls to the two timber gates,’ Wheeler explained in the *Manchester Guardian*. ‘The roadway itself, until the extreme end of the prehistoric period, would be of bare chalk, worn smooth by traffic which included wheeled vehicles. The worn tracks of these vehicles can now be seen on the floor of the passage within the gates, and they indicate a gauge approximately to that of the present day.

‘Just outside the gate, and within the earthworks, stood an iron-working establishment, and possibly a smithy; and hereabouts from time to time took place the burial of the less important inhabitants of the town.

'The scene outside the gates was probably a busy one. Waggon's would assemble here, possibly for the payment of dues and for the shoeing of cattle and the repair of harness. At the gate itself would be a custodian whose stone-built shelter has been uncovered during the present excavations, and in case of need an armoury of well over twenty thousand sling-stones lay handy in a pit close inside the gate.

'Beyond, began immediately the hutments of the towns-people—for the most part small circular houses supplied with cooking pits and storage pits of the now familiar type ranging from two to three feet to eleven to twelve feet in depth. In these pits, and in ovens beside them, were baked the wheaten bread of which actual specimens have been found, together with considerable quantities of wheat itself. The corn was doubtless grown close outside the ramparts in small square fields of the type known to have been used in the latter part of the prehistoric period.'

This description of the environment in which there lived potters and weavers and metal workers and farmers, reveals some of the factual evidence unearthed by the spade—or the teaspoon. There was an immense amount of such evidence in Maiden Castle, and during the four-year period of its excavation—and the minor but connected excavations at nearby Poundsbury and Chalbury—there occurred more than one event which could justly be termed a 'sensation'.

There was the investigation of the immense neolithic mound, originally 5 feet high, 60 feet wide, and a

third of a mile in length. Inside this there was uncovered the mutilated body of a young man whose brain had been removed—together with indications that here, at least, the inhabitants of Britain indulged in ritualistic cannibalism some four thousand years ago.

And there was, most dramatic of all, the excavation of the eastern entrance to Maiden Castle. From this Wheeler was able to reconstruct the events of a certain day—probably in the year 44—when the Roman troops crossed the River Frome and saw Maiden Castle ahead of them, ‘on an island of the downs, amid the cornfields of its inhabitants’.

The events which followed—the preliminary barrage of Roman projectiles, the uphill assault, and the bitter infighting between the ramparts and the towers, the brief hand-to-hand battle in which the defenders were cut down by the disciplined legionaries, the savage massacre of the defenders as the wooden huts were fired—all these were deduced from the evidence. And when Wheeler and his team had finished, almost as much was known about this battle, nearly nineteen centuries ago, as was known about Agincourt or Crécy.

The most moving single relic of the struggle which was unearthed was undoubtedly one particular skeleton. It was the skeleton of a British defender, and between the discs of his spine, mute but unmistakable evidence after more than eighteen hundred years, there still lay the Roman arrowhead that had pierced the body and ended his life as he stood on the defences, shouting

defiance as the legionaries pressed relentlessly uphill beneath the covering barrage.

This was perhaps the most dramatic piece of evidence. But there was much more, and in an article in *The Times* early in 1938, Wheeler explained how the reconstruction of the assault was more than mere guess-work.

'The scatter of iron heads of Roman ballista arrows over the eastern part of the castle, all of the same Romano-Belgic level, are, in their context, fair testimony to the barrage,' he pointed out. 'The foundations of four stone platforms or towers among the outworks of the gateway indicate something of the provisions for defence. A thick layer of ashes, associated with numerous postholes over the area immediately outside the actual gates, is witness for the burning of the huts; and into the ashes are cut in haphazard fashion shallow, irregular graves, many of them containing two skeletons interred simultaneously—some thirty in all. Deep in a vertebra of one of the skeletons was imbedded one of the ballista arrowheads already referred to; it had passed into the body from the front, below the heart. Seven or eight other skeletons of the series bore extensive sword-cuts on the skulls; and in some cases deep successive wounds, any one of which would have been fatal, testify to the savagery of a massacre rather than to normal battle casualties.'

Imaginative planning before a single turf was cut, rigid discipline in digging, the use of all scientific techniques that might help—each contributed some-

thing to the reconstruction. And the care taken is well illustrated by one small fact—that the imprint of fine linen on a flint showed that at least some of the skeletons had been buried in their clothes.

The excavation of Maiden Castle was completed in 1938. Before then, Wheeler had been dealt one of those cruel blows such as cause even the best of men to doubt all things. In the spring of 1936 he left England for a tour of the Near East, a six-week tour during which he visited archaeological sites in a number of countries, investigating the work being done in remote places. Inevitably he was out of contact with the rest of the world. Only when he reached Paris on his return, six weeks later, did he learn that his wife had died in hospital three days previously.

Tessa Wheeler had been more than an archaeologist in her own right, a Fellow of the Society of Antiquaries and later a member of its Council, staunch helpmate to her husband in his excavation, and specialist in such delicate tasks as the removal of Roman mosaics. She also carried on her own shoulders the bulk of the administration and organization at the more important sites; in other words she took over the scores of imperative but annoying and worrying chores that had to be done by someone, and allowed her husband and his helpers to get on with the main job, unharassed by such matters. She had also played an essential part in the preparations for founding an Institute of Archaeology, an achievement which Wheeler feels today is one of the most important for which he has

been responsible; it was ironic that she should have died before being able to see the result of her work.

When Wheeler had launched himself out on to the seas of professional archaeology after the end of the First World War, appointments were few, the status of the profession still in doubt, and training in the present sense of the word virtually non-existent. Throughout the 1920's the position steadily changed. The value of archaeology, both as a discipline and as an exciting occupation which could reveal the people of the past, slowly became appreciated. Interest grew. More appointments became available, particularly in the universities. An increasing number of students—a high proportion of them encouraged by their work on Wheeler's excavations—looked around for some place where they could learn more about the rudiments of the craft. They looked in vain. In the whole of Britain there existed no archaeological school or training centre. Information was either gained on one of the rare sites such as those controlled by Wheeler, or was picked up casually, on a hit-or-miss basis, much as it had been picked up throughout the preceding half-century.

In 1926 Wheeler drew up plans for an Institute which would fill the gap. All that was needed was the money to finance the venture, and the money was a long time coming. It was not until 1937 that the Institute of Archaeology was opened as a department of the University of London. There had been eleven years of 'selling' the idea, of appealing for funds, of

negotiating, of insisting—often in the face of apathy—that such an Institute was really needed, before Sir Charles Peers, Chief Inspector of Historical Monuments, helped to launch what he described as ‘a laboratory of archaeological science, wherein the archaeologist of the future may learn the essentials of his business’. Throughout all the years of planning, Tessa Wheeler had played a vital part. ‘Without her tireless loyalty through those days the scheme might easily have fallen short of success’, wrote Wheeler later.

Under his direction, the Institute not only gave what might be called ‘conventional’ archaeological training; it also gave instruction in archaeological photography, with the help of Cookson, who had been brought on to the staff and who helped to lay the foundation of what is today a unique studio for archaeological photography; it gave instruction, in a technical laboratory, in the ways in which various sciences could assist the archaeologist. During the years that followed 1937 the Institute formed the richly-germinating seed from which so much of current British archaeology has sprung.

Directing the Institute and fighting—with growing success—the battle for archaeology’s place in the academic world formed merely a part of Wheeler’s activities during the later 1930’s, for he achieved what might be termed an archaeological hat-trick. In 1937 he was Dalrymple Lecturer to the University of Glasgow, Lewis Fry Lecturer at the University of

Bristol, and Norman Lockyer Lecturer at the British Association's annual meeting.

By this time he was also seriously engaged in linking the story of prehistoric Britain, as revealed by the work at Maiden Castle, with the prehistory of northern France. Once the excavations in Dorset had begun to uncover the story of the site, a reconnaissance was made of Normandy and Brittany in the hope that Maiden Castle might be placed not merely in an English but in a Continental context. The results were promising, and in the summers of 1938 and 1939 Wheeler, accompanied by Cookson, Wedlake, and a group of enthusiastic helpers and students, spent a number of weeks in France. There they investigated nearly a hundred fortified enclosures, mostly hill-forts of the Iron Age type, set in the landscape across which Allied troops were to fight their way back into Europe a few years later, and excavated five of them.

The shadows of the war to come had loomed over the work in 1938. By mid-August of the following year, while digging was in progress, it became clear that peace could not last much longer. Wheeler handed over to his colleagues, took the first available boat to England, and arrived to find that the War Office had that very day taken up his previous offer to raise a new light anti-aircraft battery when called upon.

Now the call came. The war that followed not only destroyed the lives of many, and disrupted the lives of most. Wars have to be paid for in money as well as

lives, and the financing of archaeology, as well as of much else, was drastically altered by the conflict.

Looking back many years later, Wheeler summed up the position neatly. 'The days of the popes and princes and bicycle-manufacturers as major patrons of learning vanished almost completely in September 1939,' he said to the Society of Antiquaries. 'Only in exceptional circumstances can a great corporation such as Imperial Chemical Industries or a stray surviving benefactor of the old school still come to the rescue.' But by that time, Wheeler had fought his second war and was deep in what was the biggest archaeological adventure of his whole life.

DISCOVERING ANCIENT INDIA

FOR the first four years of the Second World War, Wheeler had little active contact with archaeology—although he had more than might have been expected, since chance, combined with the advance of the Eighth Army, brought him in 1943 to the massive Roman remains of Tripolitania.

However, what a man does in time of war is always revealing. On 3 September 1939, Wheeler was within a few days of his 49th birthday. He was not a man of war either by tradition or by training; and, quite apart from his age, it would have been easy for him to shelter behind his professional qualifications. Instead, he raised his own unit, took it abroad, through the battle of El Alamein and the campaign that followed in North Africa, and rose in the process to the rank of Brigadier. Feeling that he could hardly do his job as a gunner 'without some first-hand knowledge of the receiving end of the business', he used twenty-four hours' leave to fly in a Wellington bomber on a raid on Rhodes—a sortie made surreptitiously and without official approval or even knowledge. And when, some months later, he was offered one of the 'plum' jobs

of archaeology while preparing for an operation that promised to be—as it was—both difficult and dangerous, Wheeler refused to accept until the operation had been carried out. All of which may tell little about archaeology but suggests a lot about one particular archaeologist.

When the Eighth Army swept westwards across North Africa after the victory of El Alamein, no steps had been taken to safeguard the imposing Roman remains which had been partially excavated by the Italians before the war, and which now lay near the main axis of the advance. Government of the territories from which the enemy had been driven was an art which the Allies had as yet had little opportunity of practising; no one, it appeared, had so far bothered to think about the care of archaeological sites. Many officers—though not all—had a wide ignorance of what was involved; their men, coming upon the columns and statues of the three cities which had given Tripolitania its name, were apt to regard them as ideal targets or as bill-boards on which they could cut rude notices about the enemy.

Wheeler, realizing the damage that was being done, succeeded in gaining the co-operation of the Allied Command. There were difficulties, of course; but by the time that the Allied forces were poised for their first step across the Mediterranean into Sicily, the Civil Affairs Branch of the A.F.H.Q. had been made aware of the treasures for which they were responsible. The Italian archaeologists formerly in charge of the sites in

Tripolitania had been run to earth by Wheeler in Sabratha and instructed on what they should do. And here—following, one feels, the lessons of Maiden Castle—he had descriptive pamphlets printed, explanatory notices put by the ruins, and lectures ‘laid on’ for visiting parties of Allied troops on local leave.

Some soldiers, at least, knew what the business was about when, as they fought their way up Italy, they found themselves handling a small pamphlet called ‘Things Worth Saving and What to Do About Them’: a pamphlet which had the true Wheeler touch and which exhorted its readers to ‘remember the meaning which the Vandals, a Germanic tribe, gave to their name by their actions in this regard. History has a long memory.’

By this time, however, Brigadier Wheeler had left the Middle East for an appointment the first news of which had come to him in Algiers where he was involved in plans for the invasion of Italy. He has described how his Corps Commander—the General Horrocks whom Montgomery had ‘discovered’ before Alamein and who was later to lead XXX Corps from the fields of Normandy to Berlin—had come up to him with the words: ‘I say, have you seen this?’ Then he had read a signal which asked for Wheeler’s release so that he could become Director-General of Archaeology in India. Horrocks’s exclamation of mingled amiability and surprise: ‘Why, you must be rather a king-pin at this sort of



Sir Mortimer showing Her Majesty the Queen site of Maiden Castle, Dorset, in July, 1952.



At the Royal Academy banquet in June, 1957.

thing! You know, I thought you were a regular soldier!' is one of the tributes Wheeler is unlikely to forget.

The operation for which Wheeler's unit had been earmarked was the formation of a bridgehead at Salerno, well up the Italian peninsula, a bridgehead deep in enemy territory which would eventually be linked to Allied forces from the south, and from which it was hoped that Rome could be captured. The landing, and the subsequent fighting, would obviously be difficult, and Wheeler felt that he should stay with his 12th Anti-Aircraft Brigade until this particular phase of the war had passed. It took longer in its passing than the authorities had expected. The issue of the Salerno landings was in the balance for some while, and it was only in February 1944 that Wheeler, now transformed from Service Brigadier to civilian Director-General, set sail for India.

While he was persuading the Service authorities that preservation of the Tripolitanian ruins formed part of the civilized attitude for which the war was being fought, Wheeler's final report on the Maiden Castle excavations was published in Britain by the Society of Antiquaries. It was suggested by some archaeologists that publication might have awaited more normal times, and Wheeler himself stated in the introduction that 'the following pages are less a report than the salvage of the report that should have been'. Yet in the uncertain days of war Wheeler felt that any publication was better than none; and there were, after all,

to be no more normal times in the pre-war meaning of the word.

Before he left England for India after a short spell of leave, Wheeler underlined in two ways the results of his archaeological experiences in North Africa. He addressed the Society of Antiquaries on the problem of preserving antiquities in the war zones. And he wrote for *Antiquity*, still edited by his old friend Crawford, a strong plea for a proper archaeological survey of the badly blitzed City of London, to be made before the area was rebuilt, as it obviously would be after the end of the war.

The major rebuilding of London after the Great Fire of 1666 had mutilated but not completely destroyed the accumulation of archaeological evidence which lay twenty feet deep under the modern city, he pointed out. Post-war reconstruction, much of which would require massive foundations, would be entirely different, and the evidence should be gathered before it was for ever destroyed. 'Above all,' he concluded, 'it is vital that the work be organized and begun in such time that it shall not be hastened beyond the proper pace of science. The task is not a small one. At stake is nearly two thousand years of accumulated material bearing upon the history and everyday life of the greatest city in the world, potential knowledge which can now be acquired for relatively modest cost but can never again be bought.'

Here was an enterprise which Wheeler himself might well have directed had he not been bound for one of the

most exciting jobs in the world of archaeology. Something of the spirit in which he was to tackle that job was hinted at by Crawford when, in *Antiquity*, he commented on the post which Wheeler was now taking up. 'His finely unconventional official memoranda are clarion-calls that should rally to his side everyone in Whitehall, as well as in India, who is genuinely interested in Indian history and culture', said Crawford. 'They are inspired by that practical horse-sense which characterized the British before they were strangled by their own Treasury. One can imagine the feelings of horror and amazement with which his Memoranda will be read by pen-pushing civil servants everywhere.' One must allow for Crawford's own hearty detestation of all pen-pushing civil servants; yet his words do truly indicate the impression of avenging angel that Wheeler made when he descended upon India, both fascinated and stimulated by the almost boundless prospects offered by that vast sub-Continent.

The Archaeological Survey of India had gone through good, bad, and indifferent periods since it first began to evolve in the latter half of the nineteenth century. The outbreak of the Second World War had caught it in one of the bad ones, and a drastic re-organization of the whole archaeological machine was one of Wheeler's first tasks. That he completed it without unduly offending Indian archaeologists was a triumph of diplomacy.

Even in its most enlightened days, the Survey had failed to work on the scientific basis that had for long

been accepted in Britain and in most of Europe. This was not entirely the fault of those in charge, for their problems, the tools available to them, and the results which they were briefed to give, were all different from those of their European colleagues. Thus, when Wheeler sailed east in 1944 there lay before him the prospect of planning a series of major campaigns in a country virtually untouched by modern archaeological methods and bristling with the sharpest of problems. Few jobs could have been more after his own heart.

First of all, the rust had to be knocked off the existing machinery. Within a few months of taking up his appointment Wheeler had reorganized the Survey, putting all conservation under a central headquarters, creating new posts, setting up excavation camps where students could be trained, and forming a new Excavations Branch within the Survey itself. His reason for this last move gives a clue to his whole approach. 'The excavation of a site, like the ordering of a battle, must be thought out and co-ordinated by a single present and directing mind', he wrote in an official directive. 'Otherwise chaos, waste, inefficiency are inevitable.' This illustrated his handling of the tactics of archaeology, the methods by which individual sites should be dug. In a comparable way, the current haphazard selection of sites themselves had to be replaced by something more scientific. Explaining the principles of planning ahead in the pages of *Ancient India*, the Bulletin of the Survey which he founded, he gave a

classic description of the new strategy. 'In a country so vast and containing so many ancient sites as India, careful planning on a large scale is essential if archaeological exploration is to produce coherent and significant results within any reasonable space of time,' he pointed out. 'To dig a site merely because it "looks good" or because it *might* produce useful information would be comparable to carrying out a surgical operation at random on a patient in the hope of finding somewhere the cause of an undiagnosed disease. It was thus that the primitive surgeon used to cut a hole in a man's skull in the hope of letting out a headache. It is thus that ancient sites—megalithic tombs, for example—have been constantly opened up in the hope of letting out their secrets. Not thus is the orderly way of science. True, a happy chance will from time to time add unexpectedly and dramatically to knowledge. Nevertheless, the progress of science depends, not on these hazards, but on the methodical, logical use of the disciplined imagination in the evaluation of cause and effect. It depends upon careful strategic planning.'

This planning had two main objectives, to which a third was later added, the first two roughly coinciding with the two main geographical features of India. In the south, spreading from the coastal strips across the Deccan Plateau, there had already been discovered the remains of more than one Indian civilization. The relationship of these, one to the other, was roughly known; what was not clear was the relationship of the

whole series to the rest of world history. It was as though there was one series of important events listed from 1 to 10, and a second listed from A to J; and as though it was not known whether event number one took place in the same year as A, the same year as E, the same year as J, or any other event in the A to J series. Discovery of the link between the two series was the first of Wheeler's main objectives.

The second was a full investigation of the Indus Valley civilization which some four thousand years previously had stretched for nearly a thousand miles along the great plains that run from the Himalaya to the sea. Here, based on the two cities of Harappa and Mohenjo-daro, there had existed for centuries what Wheeler has described as 'the vastest experiment in civilization before the advent of the Roman Empire.' Yet although the Indus civilization had already attracted the excavator, the details of its rise and fall were unknown. And, after its disappearance, there loomed a gap of centuries of which modern man knew nothing.

To these two problems there was later added a third—the problem of directly linking chronologically the ancient civilizations of north and south India.

The best hope of 'tying in' the chronology of pre-historic southern India with the chronology of the western world appeared to lie with the slender thread of Roman trade which had once linked east and west. Wheeler therefore sent out members of his staff to the various places where Roman coins had been found,

hoping that at one of these sites it might be possible to link such finds with the Indian past. His men had no luck.

Then, shortly afterwards, casually exploring the Government Museum in Madras, Wheeler himself looked in a workshop cupboard and his hand 'closed upon the neck and long handle of a pottery vessel strangely alien to that tropical environment'. Here, its significance unrecognized until now, lay the clue for which he had been searching, a wine-jar from the Mediterranean, more useful for dating purposes than Roman coins—more useful, that is, if the site where it had been found provided similar finds, and if that site could itself be tied into the chronology of ancient India.

The site was Arikamedu, a scarp standing twenty feet above a lagoon two miles south of Pondicherry, then the capital of French India. Wheeler hastened to the township from which French archaeologists had carried out minor excavations at Arikamedu before the war—excavations which had been made on a purely local basis and without any attempt to relate them to the main problems of India's past. Wheeler still had two worries. The first was that the wine-jar in the Madras Museum might be merely an isolated find. The second was that even if it were not an isolated find, all the other relics of Roman times would have been removed—taken from their habitat, so to speak—thus leaving nothing of Roman origin that could be chronologically tied in with the Indian culture.

Wheeler's first doubt was set at rest when he reached

Pondicherry and peered into a number of museum-cases in the public library. 'For the second time within the month, my eyes started in their sockets', he wrote later. 'Crowded together were fragments of a dozen more Roman amphorae [two-handled vessels for holding wine or oil], part of a Roman lamp, a Roman intaglio, a mass of Indian material—potsherds, beads, terracottas—and several fragments of a red-glazed ware which no one trained in the school of classical archaeology could mistake. After much searching, the keys were discovered and I found myself handling the fragments of cups and dishes of the time of Augustus and Tiberius from the famous potteries of Roman Arezzo. My search was nearly over. . . .'

Plans were immediately laid to excavate the Arikamedu site, and in the weeks that followed there was exposed the outline of an Indo-Roman trading station, complete with the relics of its muslin-making and bead-making industries. For Indian archaeology in general, however, the most important moment came when an Indian student emerged from a trench waving the portion of a red dish. 'Removal of the slimy sea-mud revealed the dish as the signed work of a potter whose kilns flourished nearly two thousand years ago and five thousand miles away, on the outskirts of Arezzo in Tuscany', Wheeler later wrote. 'Were drama admissible to the archaeological scene, I should have been tempted to describe the moment as dramatic!' The chronology of ancient India, in which Arikamedu could be placed—the 1 to 10 series—was now linked

by the Aretine pottery, whose date was known, to the A to J series of the western world. 'By establishing at last the precise chronological position of an extensive South Indian culture, the archaeologist has provided a new starting-point for the study of the pre-medieval civilization of the Indian peninsula', wrote Wheeler in his first report on Arikamedu. And he had, it might be added, been at work in India for little more than a year.

Then, with the first excavations at Arikamedu completed and others planned, he turned north-westwards to the Indus. Here the problem was entirely different. Mohenjo-daro and Harappa, the two great cities of the Indus civilization, had both been excavated. But whereas, as we have already seen, modern archaeologists have developed the technique of excavation vertically, thus building up the story of a site mainly on a chronological basis, the men who had dug Mohenjo-daro and Harappa had excavated horizontally, laying bare a large area, parts of which might belong to one period and parts to another.

At the time, there was some excuse for this, as Wheeler stressed when, in 1950, he spoke to the Council for British Archaeology. He explained that the men who had dug the Indus sites had ignored the principles of stratification which might have revealed so much. 'But what the excavators, with all their up-Guards-and-at-'em methods *did* do, was something that in a sense transcended all this', he pointed out. 'They built barracks on this desert spot, imported whole regi-

ments of hillmen with their families, and turned two thousand of them or more on to the dusty mounds. Day after day, building after building emerged from the soil, streets and lanes fell into place in a great town-plan, walls and drainage on a scale altogether new to knowledge began to build a picture of an ordered policy that was in the fullest sense an evolved civilization.'

They had revealed, in fact, a picture of the fully-matured civilization. What they had failed to produce was any indication of how it had grown through the centuries, then waned until it had disappeared beneath the traces of different men with different ideas. Or had it, perhaps, not waned but been destroyed? To these questions, as to so many others, the previous excavators had given no answers. Wheeler began to supply them.

Even before the work started, his experienced eye, plus a pinch of what some would call intuition but others would more accurately describe as training, had glimpsed one secret which had remained undisclosed to all earlier investigators. This was the simple but significant fact that both Harappa and Mohenjo-daro had been defended cities. Until 1946 it had been thought that the Indus civilization had developed without the need for fortifications—something unique in this particular context. Now Wheeler looked at Harappa with an eye long accustomed to noting on British sites the significance of minor differences of colour or texture, and he realized that

the piled masses of material surrounding the city's central mound were in fact the remains of ancient and impressive defences. Excavation subsequently proved that the eye was right. 'A few minutes' observation', he later pointed out, 'had radically changed the social character of the Indus civilization.'

Excavations during the following months showed how that civilization had risen, declined, and fallen in the course of centuries. At both Harappa and Mohenjo-daro the technical problems were considerable, and at Mohenjo-daro, where the lower and earlier layers of the city lay below what was now the Indus water-level, they were exceptional. Just how exceptional was shown by Wheeler when he later told in London, addressing the Royal Society of Arts, of how he had dug there in 1950, after partition had given the Indus Valley to the newly-created Dominion of Pakistan.

'Digging in the driest season of the year, we struck water at fifteen feet below the present surface and, with mechanized pumps and careful engineering, we dived for a further ten feet into the streaming mud', he said. 'Then one night, when the pumps were labouring, a thousand jets of water burst from the sides of our cutting, and with a sullen roar it tumbled in. We had reached farther than any of our predecessors, but time and tide had beaten us.'

'Beaten', however, only in a relative sense. When the initial excavations directed by Wheeler in the Indus Valley had been completed the great river culture could be seen not as a single 'still' but as a sequence

of pictures, following one after the other and demonstrating the rise and fall of a civilization.

These two major achievements, in southern and in northwest India, were carried out against a background that included the training of students, preparations for the establishment of a National Museum of India, and the looming shadow of partition which was to divide the sub-Continent amid a welter of bloodshed.

Meanwhile, Wheeler pressed on with his plans for linking chronologically the stories of southern and of northern India. By early 1948 he had little time left, for his four-year term of office as Director-General was running out, and he had already planned to return to Britain.

Early in April he made the last of his visits to a unit in the field. This was stationed at Sisupalgarh in Orissa, and was excavating a fortified area whose first earth fortifications were thought to have been built about 200 B.C. A twenty-five foot section had been cut and at its lowest levels was found, as had been expected, a link with the megalithic tombs of southern India—those built of large stones. This, as Wheeler subsequently explained to The Royal Society of Arts in London, was the first moment of special cultural importance which the site revealed. 'The second moment,' he continued, 'was the appearance of our southern rouletted pottery of the first century A.D. This began rather more than half-way up our twenty-five-foot section. Here was the dated contact for which

we had devoutly hoped at the outset of our excavation.'

The chronology of Sisupalgarh was now securely tied to the story of southern India. Something else was needed to tie it to the north—something either from prehistory or from protohistory, that nebulous period during which man is just beginning to leave written records. That 'something' appeared. It was 'the occurrence, somewhat higher, though in the same general horizon, of a distinctive black polished ware of a kind which had for long been characteristic of the great prehistoric or protohistoric cities of the Northern Plains,' said Wheeler. 'Stanley and Livingstone had met in the depths of this unexplored Orissan site. For the first time we had a firm correlation between the cities of the South and the cities of the North. That was a beginning which was for us a source of no little satisfaction. It was the result of much careful planning and no less painstaking excavation. It was also a trumpet-call to further work.'

But it was, in this case, to be work for others. A few months later Wheeler was back in Britain—contemplating the numerous attractive and exciting posts of which he could now take his pick.

MAKING ARCHAEOLOGY REAL

WHEELER returned to Britain in 1948 with his wife, for he had remarried in 1945. By this time the politicians had cut the Indian baby in two. From the great geographical lozenge which the sub-Continent formed, there had been carved the countries of India and of Pakistan—the latter consisting of western and eastern portions separated by more than a thousand miles of virtually hostile territory. In the western portion lay the Indus Valley, and it was natural that Wheeler should be invited to become Archaeological Adviser to the Pakistani Government when his appointment in India ended. However, he had been out of Britain for nearly seven years, and there were scores of plans and projects crying out for attention. Finally, he compromised by agreeing to visit Pakistan for three or four months annually for the next three years.

Since those days, his activities have continued to multiply in a number of ways. He has continued to stress the need for proper archaeological training and for its imaginative use, and he has himself continued to supervise a number of excavations. He has reaped a harvest of academic rewards, and he has also become

a pioneer in the use of television to stimulate interest in the adventure of archaeology.

Adventure is perhaps the key-word. For whether appealing for higher standards of training or of excavation, addressing the Society of Antiquaries as President, or talking to millions in a television programme, he has always underlined his own personal archaeological philosophy—that the study of man's past is an adventure; and that 'however broadly we use the words, man is in some sense the casket of a soul as well as five-shillingworth of chemicals. And his recorder must therefore be a good deal more than a rather superior laboratory assistant.'

The need for a broad-based archaeological training increased dramatically after the war as new techniques, the use of new materials, the utilization of the newly-discovered mechanism of nuclear fission, came into more general use. Archaeologists were quick to see how these new tools might be used, and Wheeler has given one graphic comment on how he and Crawford met Lord Cherwell, who had recently returned from the United States where nuclear fission was being used to date archaeological finds.

This method, known as carbon-dating, is based on the fact that all living matter contains two kinds of carbon, one radio-active and the other non-radio-active; when matter dies the amount of radioactive carbon begins to diminish at a known rate. Discover the relative amounts of the two kinds of carbon that exist in, for instance, a tree that was cut down and

burned in prehistoric times and one will, therefore, be able to tell, within fairly reasonable limits, when it was cut down. One of the first important examples of what this can mean came in the early 1950's when wood charcoal from one of the pits excavated at Stonehenge was analysed by nuclear physicists and found to come from a tree probably felled between 1573 and 2123 B.C. There are, of course, great difficulties in using this method of dating—although they are constantly being decreased—but archaeologists who heard of the method immediately realized that it held out tremendous possibilities. Crawford, walking home from the meeting with Lord Cherwell, realized that even although *Antiquity* was a quarterly, he would still be first in print with the news. 'It's a scoop!' he excitedly exclaimed. Wheeler, turning over in his mind just what problems could now be dealt with, cogitated on the new courses and new equipment that might, as a result, be needed at the Institute of Archaeology.

Carbon-dating was merely the most spectacular and possibly most easily explainable of the new tools which became available after the war. Science had already produced many others. Just how many can be gathered from a sentence in Wheeler's inaugural lecture as Professor of the Archaeology of the Roman Provinces in the University of London.

He was pointing out that writing is but one of the clues which the archaeologist today uses to solve his problems. 'Archaeological scholarship', he said, 'is

today the accurate analysis and synthesis of geological, geographical, physiographical, chemical, physical, climatological, biological, botanical, technological, air photographical and stratigraphical evidences, to which the written word is a welcome addition as a partner but not as king.'

Yet all this evidence had to be worried out on the ground, not in the study. To learn his job, an archaeologist had not only to theorize but to practise. And, stressed Wheeler, Britain was the best of all places in which to practise. 'Were it within my power, I would insist upon the qualification P.R.B.—Passed Roman Britain—from every British field-archaeologist before licensing him to practise abroad, whatever the nature or the period of the chosen objective there', he said.

He himself continued to excavate, although his time for such work was increasingly limited by other activities. He returned to St Albans, where work had been carried on intermittently since the 1930's. At Bindon Hill on the Dorset coast, between Lulworth Cove and Arish Mell, he investigated for the Royal Commission on Historical Monuments a linear dyke built by a group of invaders to protect their beach-head—a form of prehistoric Salerno. And at Stanwick in Yorkshire, Sir Mortimer—as he had now become—directed the excavation of a site on the six-mile long rampart and ditch about which very little was known.

This Yorkshire 'dig' provided good examples of the ways in which various specialists could help the archaeologist. Biologists estimated from the bones

which were discovered the percentage of oxen, sheep, pigs, horses, deer, and dogs which were used by the prehistoric community. And botanists deduced from the 'finds'—which included a recognizable puff-ball nineteen centuries old—details of the prehistoric climate and vegetation in the area, as well as the unexpected fact that the cherry had been introduced into northern England before the Roman conquest.

Sir Mortimer was by now, of course, one of the country's most distinguished archaeologists as well as its most experienced excavator. Soon, however, he was also to become one of its most popular figures; while by the mid-1950's he had achieved the unique distinction of being simultaneously the President of the Society of Antiquaries and one of Britain's most celebrated television personalities.

The knighthood and the Presidency of the Society of Antiquaries, were but two of the honours. He became Rhind Lecturer at Edinburgh University. He became Secretary of the British Academy. And he held, for seven years, the post of Professor of the Archaeology of the Roman Provinces at London University. All these appointments he utilized to hammer home the philosophy of archaeology which he had been preaching since the days immediately after the First World War. He insisted to the learned audiences of the Society both that archaeology should be an exciting adventurous occupation and that it could form a bridge between the Humanities and Science. And to the large audiences of television he insisted, with equal vigour,

that the thrills of archaeology could be fully experienced only by those who planned properly, thought hard, and disciplined themselves to the rigours of the work.

He had always maintained that it was part of the archaeologist's duty to explain to the uninformed; now, with the relentless extinction of the wealthy benefactor, with the extension of Government-financed archaeology, it was the uninformed who indirectly employed a growing number of archaeologists. And it was therefore more necessary than ever to tell them what it was all about, to inject into them some of the enthusiasm that he himself felt for his own subject.

This job Sir Mortimer performed with outstanding success during the 1950's. There were of course his books, even the most technical of which convey to the layman something of the true fascination of archaeology. In 1950 there came *Five Thousand Years of Pakistan*, and three years later there was published as a supplementary volume to the Cambridge History, his book on the Indus Civilization. The next year saw *Rome Beyond the Imperial Frontiers*, a book conceived nine years previously, when one of his Indian students had excitedly produced the red Roman dish from the Indian mud and, in Sir Mortimer's words, 'the pages of the historians and the geographers leapt to life; the long acquisitive arm of Imperial Rome became an actuality.' In 1954 there appeared, also, two other books. One was *Archaeology from the Earth*, the distillation of Sir Mortimer's long experiences of excavation, and a classic that in the words of one reviewer shows

that 'sweating with the pen is no less important than sweating with the spade'. The other was the report of the Stanwick excavations. And the following year saw the autobiographical 'interleaves from an Antiquary's Notebook', that he called *Still Digging*.

All these books enabled Sir Mortimer to explain to thousands what archaeology was trying to do and how it was trying to do it. Television enabled him to give to millions a similar, if more transitory, explanation.

'It all happened', he said on one occasion, when telling how he had come to appear on television, 'because when I was in America I appeared as a guest-guesser in some programme between an announcement about tooth-paste and one about chewing-gum.' Whatever the exact reason, he was invited in the autumn of 1952 to appear on the B.B.C.'s 'Animal, Vegetable, Mineral?' programme, in which a panel of experts is challenged to identify a series of unusual objects selected from a museum.

The result was astonishing. For once again as at Caerleon and St Albans and Maiden Castle Sir Mortimer succeeded in breaking through the indifference of the masses and revealing beneath a genuine, if completely uninformed, interest in Britain's past. It was difficult to hear the experts identifying a prehistoric honing stone, a Roman steelyard made in the shape of a head, a sand eel hook, or the skull of a woolly rhinoceros which had roamed the land thirty-five thousand years ago and not to feel that these were the things of life in that distant past. The skirts of Time,

fluttering in the breeze as the experts talked, touched the ordinary folk more surely than the experts expected.

Much of the success of the programme lay, however, in Sir Mortimer's own personal approach, and in 1954 he was elected by the British Guild of Television Producers as the best television personality of the year. He was soon, naturally enough, snapped up for all manner of archaeological programmes. With Glyn Daniel he drank mead from a bone horn and ate—or at least tasted—what was believed to be a replica of Iron Age gruel. With Nash-Williams, by that time keeper in the Department of Archaeology, National Museum of Wales, he discussed fresh excavations at Caerleon.

He went to Greece with the Hellenic Travellers' Club and described his impressions in three television programmes. He visited Zimbabwe, the real setting of the legendary 'King Solomon's Mines', and broadcast on his experiences. He took the chair in a series of broadcasts on Roman Britain.

In these and many other programmes he helped to stimulate the public's interest in archaeology as it had never before been stimulated. There were, of course, critics who pointed to the debit side of a too great untutored public interest: there were those who claimed that the interest was purely superficial, and those who claimed that there was more interest in the archaeologist than in archaeology. Nevertheless, far more people did begin to understand the aims of archaeology

than had understood them ten years previously; and Sir Mortimer, more than anyone else, was responsible for the transition.

How has he been able to do it?

Partly, of course, by being master of his subject. But partly, also, by his belief, beyond the bounds of normal enthusiasm, in the rightness and 'worth-whileness' of the job he is doing; partly by being able to transmit that enthusiasm in phrases that make men both listen and think.

The language reveals the man. He describes himself as 'old-fashioned enough to believe that we are sometimes led by our brains and are not constantly being kicked into the future at the unthinking end of our anatomy'. He talks of archaeology as 'in the fullest sense a Combined Operation'. He points out that 'an artistic impulse, like life itself, defies ultimate analysis', and adds that 'we can no more really explain the genesis of a thing like Celtic art than we can really explain the genesis of a bumble-bee'. He calls complacency 'the fifth column of all discipline', and in the battle against modern morons has sounded a splendid bugle-call which proclaims that 'tolerance has given us the ribbon-development that has massacred our countryside. Tolerance has given us shabby brick villas amidst the monumental glory of Snowdonia. Tolerance has made Oxford a suburb of Cowley. Tolerance—not necessity—scrawls and scribbles over some of our loveliest scenery with cables and pylons. . . .'

It is in this spirit of high enthusiasm that Sir Mortimer

continues to tackle his own archaeological problems. His success in infecting others with that passion is well shown by two typical incidents. One occurred soon after he had returned from India, when a young Cambridge graduate, about to undertake the study of Roman Britain, came to him for advice. 'My advice', Sir Mortimer told his listeners at his Marett Memorial Lecture at Oxford in 1952, 'was that given once by Mr Punch in other circumstances: *Don't*. Instead, I bade him take a jeep, go to North Africa, stake out a strip of Libya fifty miles wide, and in depth from the sea to the Sahara, and make a complete surface record of what he saw there. On the strength of his first reconnaissance he has climbed into a Trinity fellowship, and deservedly, for he is rapidly adding significant matter to our very imperfect knowledge of one of the richest provinces of the Roman Empire.'

Even more revealing was his reaction to the young lecturer in medieval history at a red-brick university who was shown in to him one morning. 'He came straight to the point,' Sir Mortimer recounts. "'I want", he said, "to lead an expedition to Chinese Turkestan. Please will you tell me how?"' I trust that no emotion showed on my face as I replied "Just three small points before you go. 1. What are you going to do when you get there? 2. What funds have you got for the purpose? 3. What staff are you taking with you?"'

Through no fault of its own, that party failed to reach Chinese Turkestan; but it reached the North-

West Frontier Province and Afghanistan, carried out useful work, and published its results in a business-like fashion. Sir Mortimer, regretting that the leader had now joined UNESCO, revealed the essence of his own approval when he added: 'He is a loss to archaeology, for his heart and his head are both in the right place. I can but hope that one morning soon my door may open again to some young Englishman—or Scot or Welshman for that matter—with the light of the sunrise in his eye.'

For it was such a light that half a century ago had enabled the young Mortimer Wheeler to see beyond the plodding routine and exacting work of archaeological discipline to the exciting country which few men had yet begun to explore.

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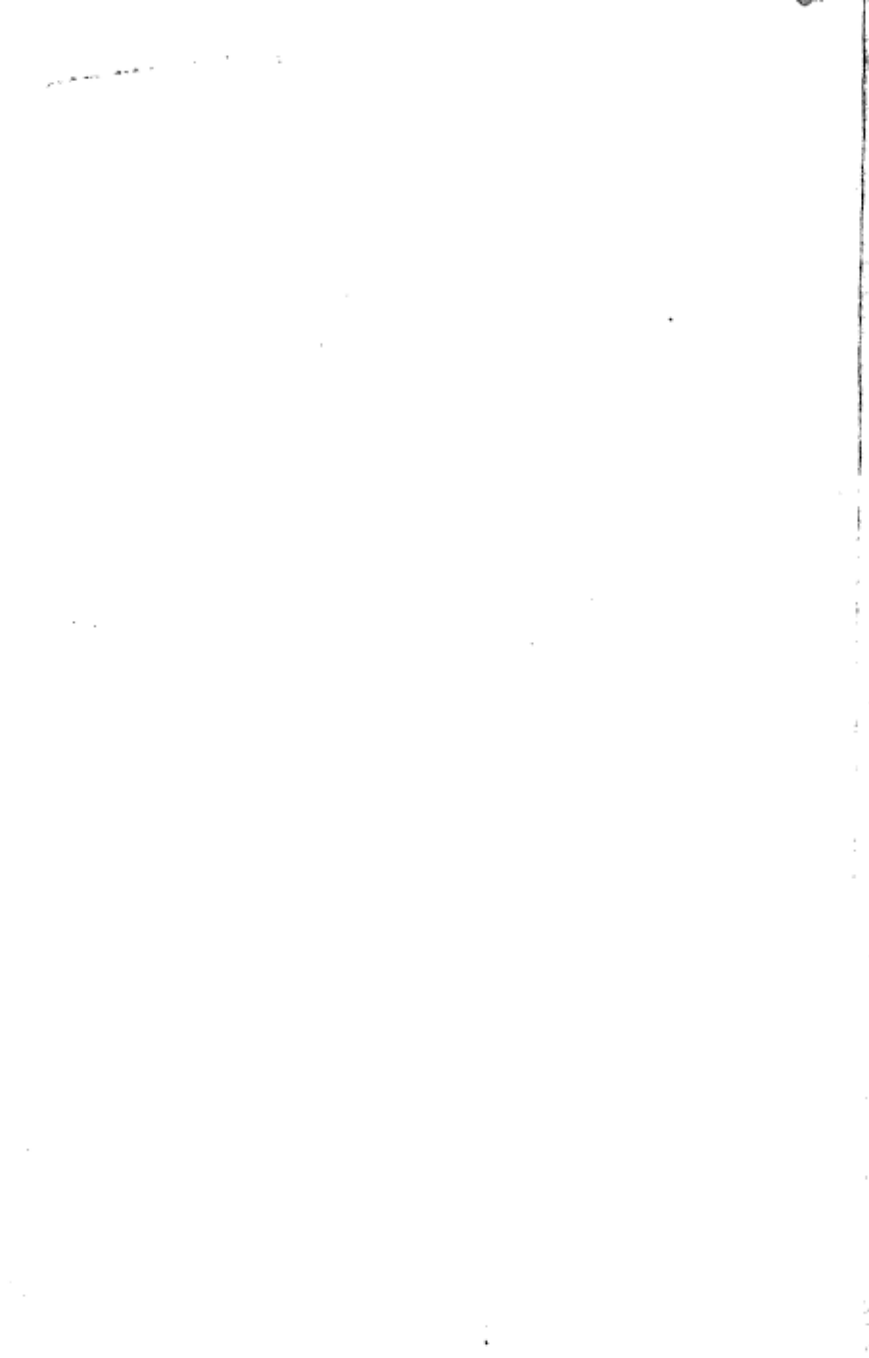
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